

READ ME FIRST

TECHNICAL SUPPORT 1-800-FORD-KEY FRENCH TECHNICAL SUPPORT Rock Hebert (514) 973-2846

For convenience this document uses short names when referring to a particular system or kit.

The list below identifies the short names used herein:

Remote Start System —> **RKE/VSS/RMST**

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

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

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

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

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

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

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

DO NOT CLAIM PARTS WARRANTY ON FORM 1863

Parts Warranty Processing:

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

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

Ford Service Parts
180 Marcus Blvd.
Hauppauge, NY 11788

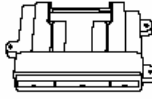









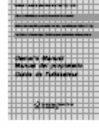
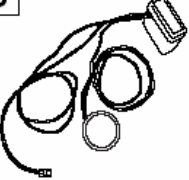

Note: If the package is sent without a claim number/claim number visible on the outside of the package, the shipment will be refused and returned at sender's expense.

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

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













REFERENCE SECTION

KIT CONTENTS

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

PARTS BAG CONTENTS

NOTE: Part bag contents are not available as service items

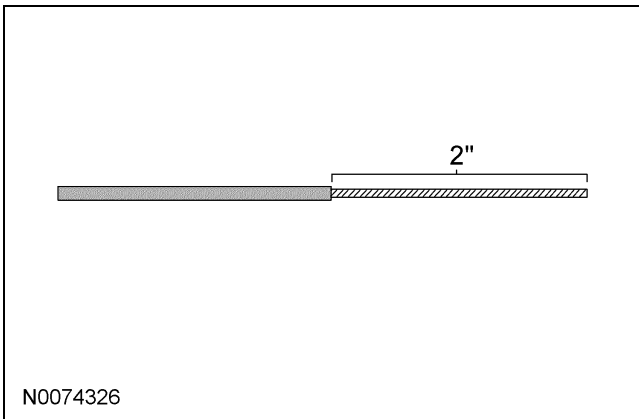
T 750 OHM  1X	U 1800 OHM  1X	V  2X	W  6X
X  2X	Y  5X	Z  10X	AA  1X
BB  2X	CC  7X	DD FUSE BAG CONTENTS 5A  1X	EE 15A  PC-14 - 4X PC-34 - 7X

GENERAL PROCEDURES

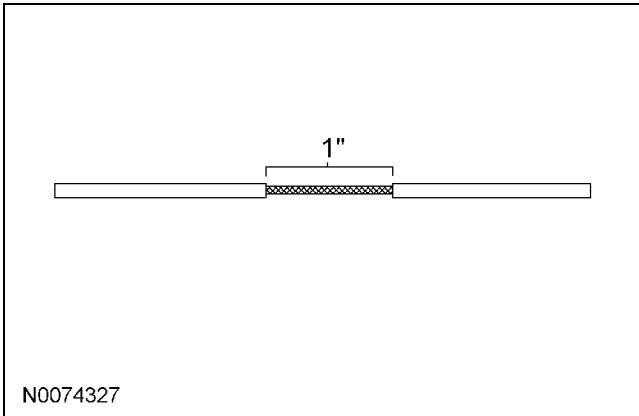
Proper Splicing Techniques

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

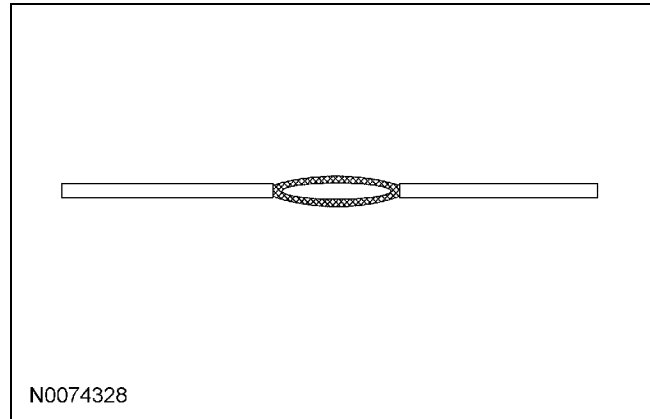
1. Strip approximately two inches of insulation from the wire to be installed in the vehicle.



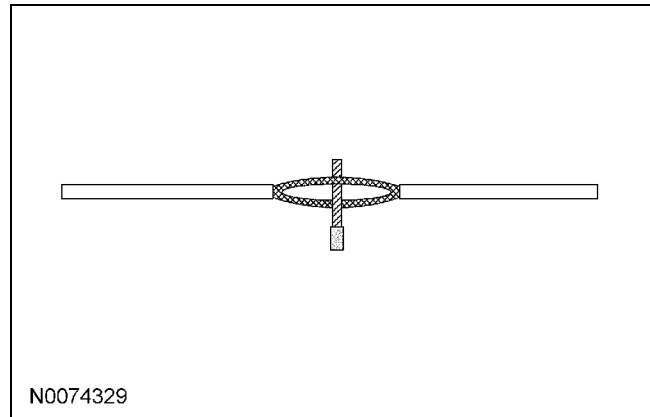
2. On the vehicle wire to be spliced into, strip one inch of insulation from the wire.



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

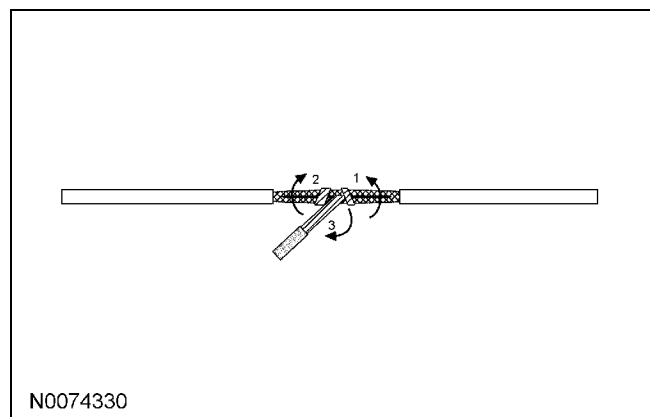


4. Insert the new wire between the parted strands. If more than one wire is being spliced, wrap them in opposite directions.



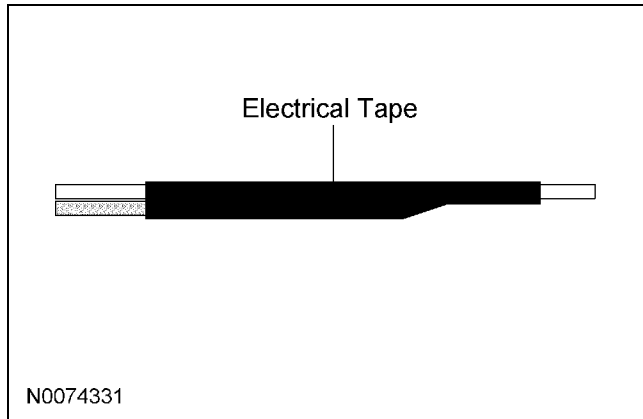
NOTE: Use Rosin Core Mildly-Activated (RMA) Solder. Do not use Acid Core Solder.

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



GENERAL PROCEDURES (Continued)

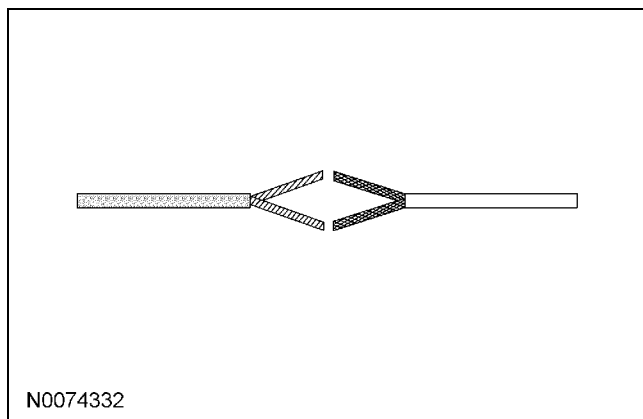
6. Wrap the connection with electrical tape so the tape covers the wires approximately two inches on either side of the connection.
 - Tape the wires together as shown in the illustration.

**Splicing End to End Connections**

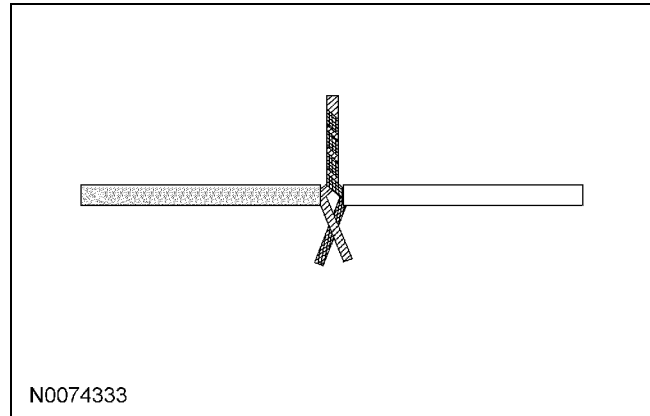
NOTE: When both ends of the wire are cut, use the end to end wire splicing procedure.

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.

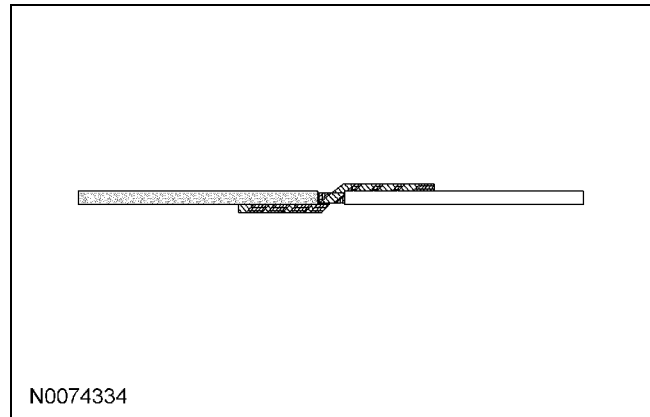


2. Place the wires next to each other and twist the upper and lower strands together as shown.

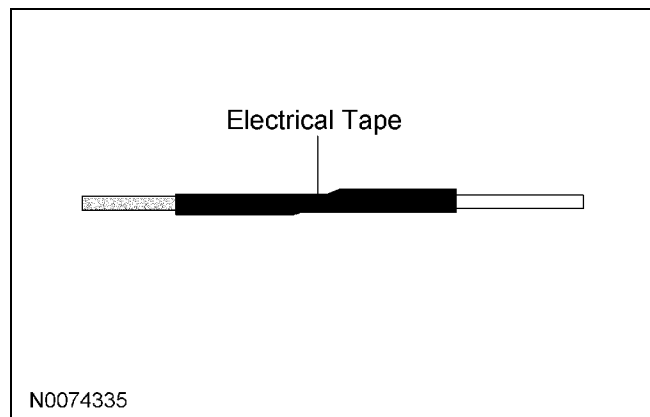


NOTE: Use Rosin Core Mildly-Activated (RMA) Solder. Do not use Acid Core Solder.

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.



GENERAL PROCEDURES

Shock Sensor Setting

Remote Start with Keyless Entry and Security System

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

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

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

Manual Table of Content

RKE/VSS/REMOTE START SYSTEM INSTALLATION

CONTENTS

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RKE/VSS/Remote Start

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Functional Test

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WIRING DIAGRAMS

Vehicle Specific Wiring Diagrams

INSTALLATION

Remote Start

E-Series

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

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

1. Verify correct kit number.

Review RKE/VSS/RMST Installation Kit Contents

NOTE: Use kit number 7L3Z-19G364-AA
REMOTE START SYSTEM

NOTE: Kits are vehicle specific and are not interchangeable.

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

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

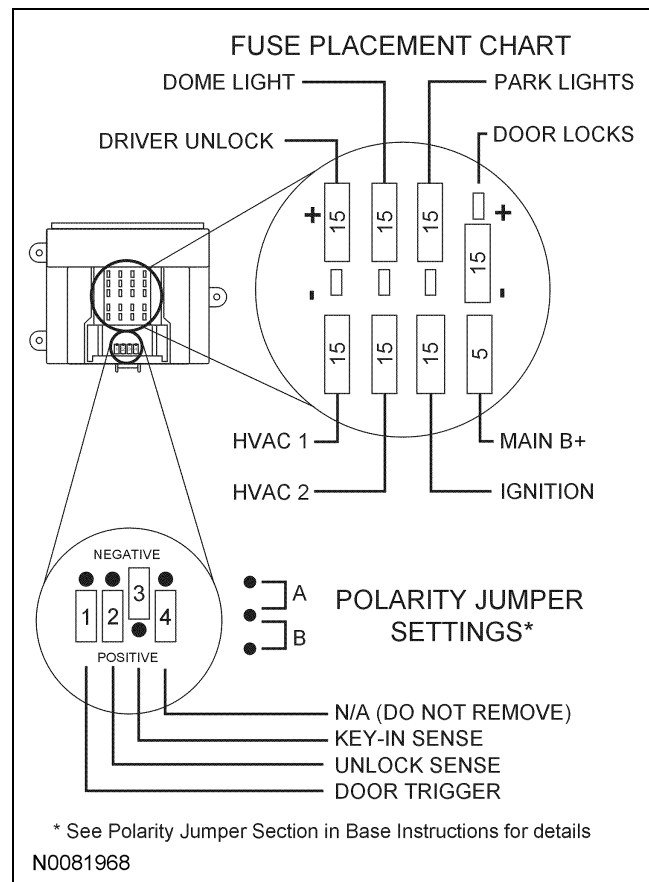
QUANTITY	DESCRIPTION
1	MODULE ASSEMBLY
1	RKE/VSS/RMST SOFTWARE CARTRIDGE ASSEMBLY
2	6 BUTTON POWERCODE TRANSMITTER
3	WIRING HARNESS ASSEMBLIES
1	DIPOLE ANTENNA
1	HOOD SAFETY SWITCH ASSEMBLY
1	INSTALLATION PARTS BAG
1	FUSE PARTS BAG
1	OPERATORS INSTRUCTIONS

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

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

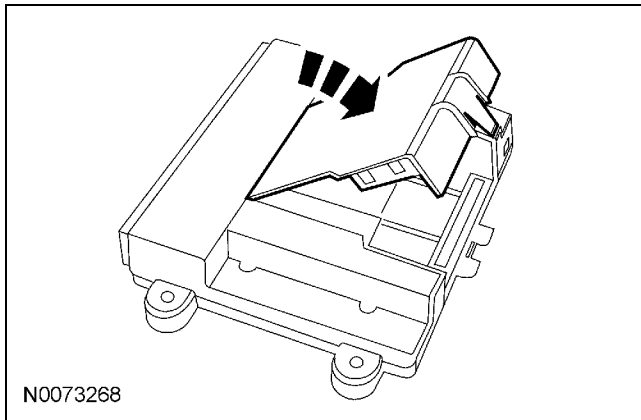
Module Preparation

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

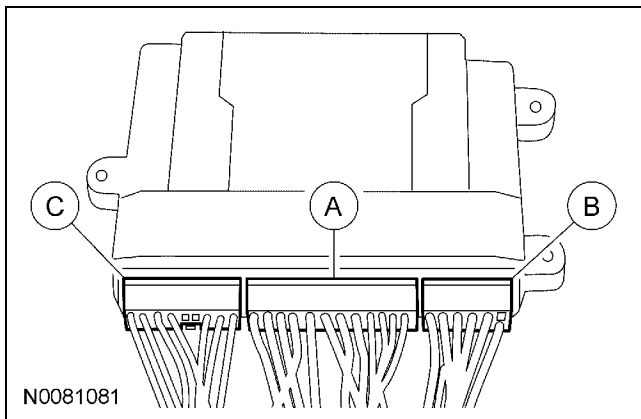


INSTALLATION (Continued)

4. Place the software cartridge onto the control module.



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

**Vehicles With Factory RKE**

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

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

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

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

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

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

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

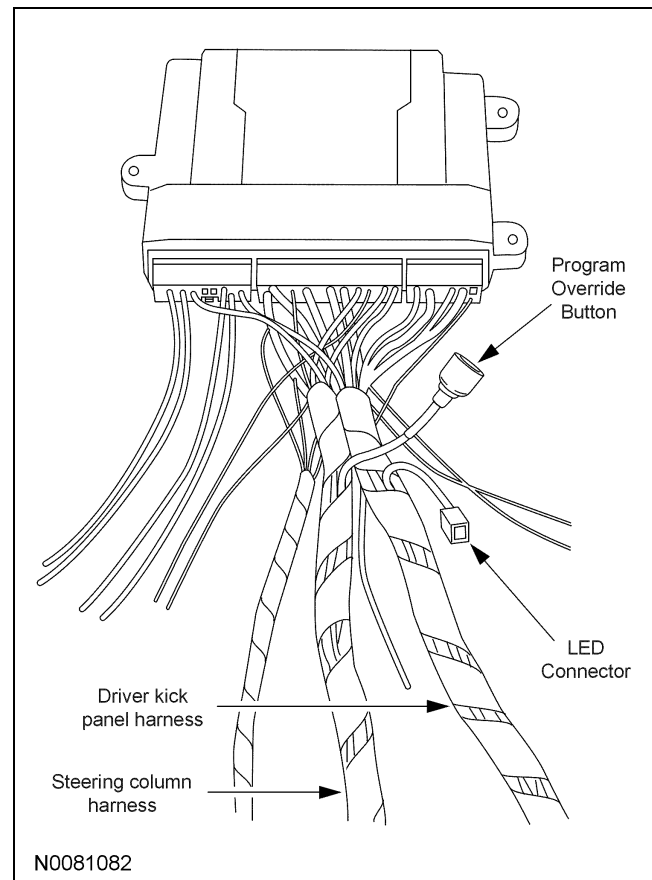
8. **NOTE:** Skip this step if Optional/Feature - Headlight Illumination is installed

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

All Vehicles

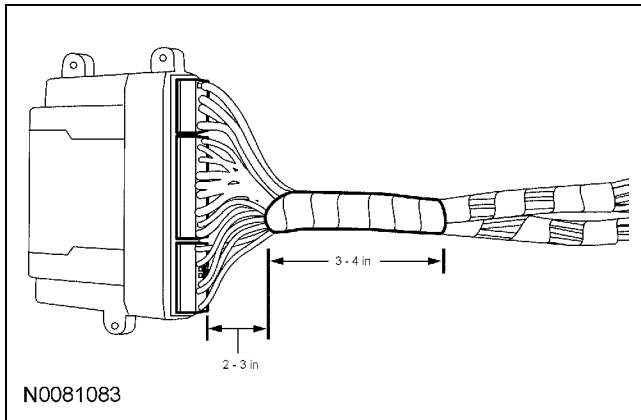
9. Referring to the vehicle specific wiring section for the system being installed, gather all individual wires that will be routed to the same areas of the vehicle into groups. Cover each wire group with electrical tape for approximately 18". Depending on the vehicle, there will be 2 to 5 different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

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

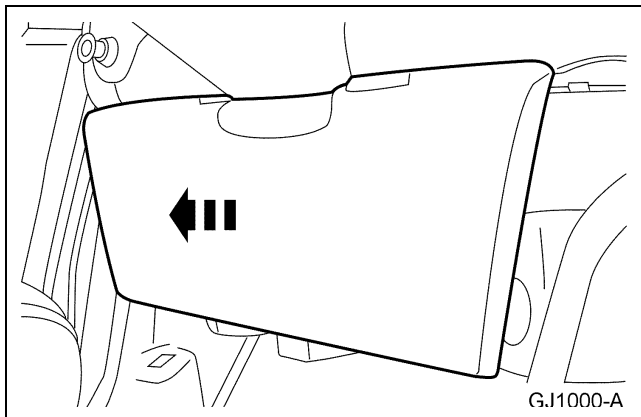


INSTALLATION (Continued)

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

**Vehicle Preparation**

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



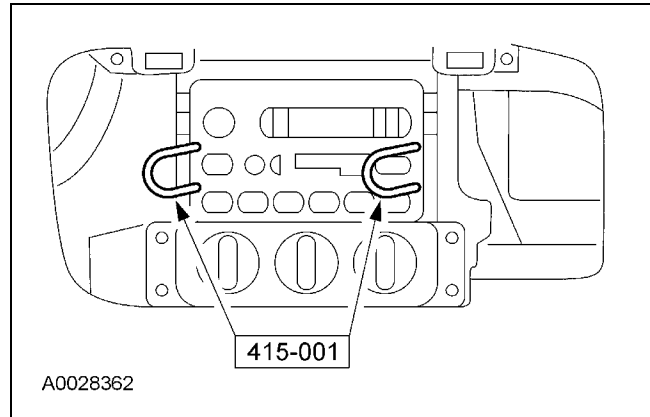
12. Remove the lower steering column shroud.
13. Remove the left hand scuff plate and cowl trim panel.

NOTICE: On vehicles equipped with a CD6 audio unit, interrupting battery power within 30 seconds of re-powering will damage the audio unit. To prevent audio unit damage, do not disconnect the battery (or audio unit), reconnect the battery (or audio unit), and then disconnect it again within 30 seconds.

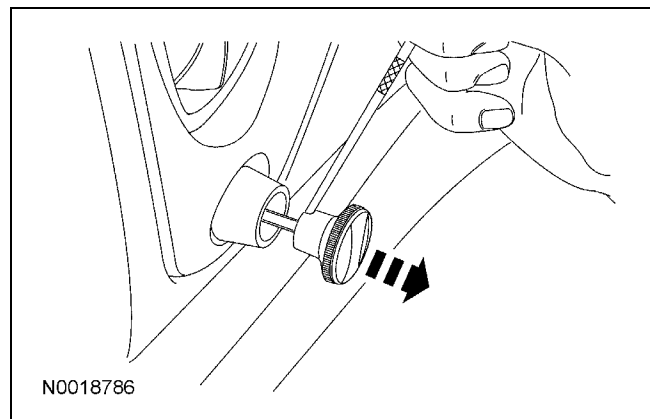
14. Using the special tool, pull the audio unit out.

15. Remove the audio unit.

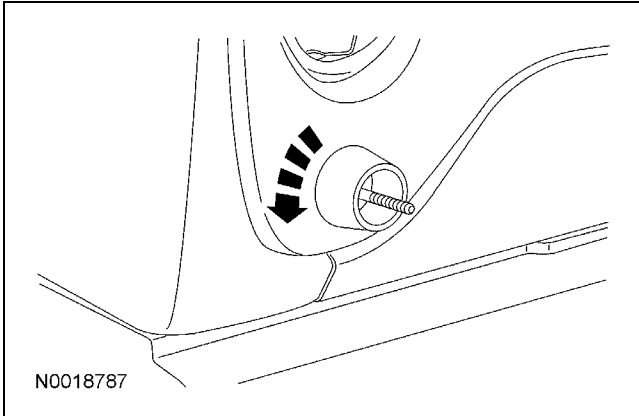
- Disconnect the antenna lead-in cable and the electrical connectors.



16. If equipped with a tilt column, position the steering wheel in the full DOWN position.
17. Pull the headlamp knob to the ON position.
18. Insert a small screwdriver onto the clip and pull the knob outward.

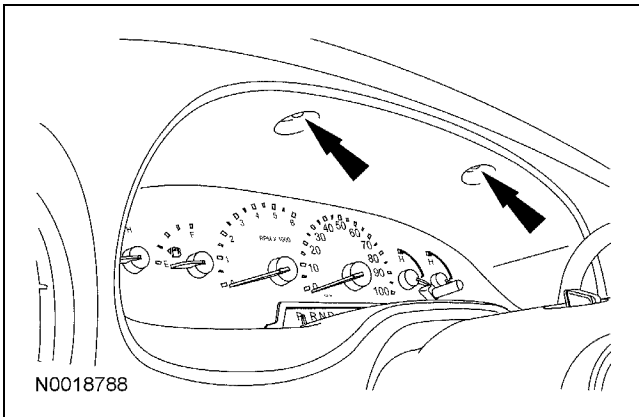


19. Remove the headlamp switch bezel by turning it counterclockwise.

INSTALLATION (Continued)

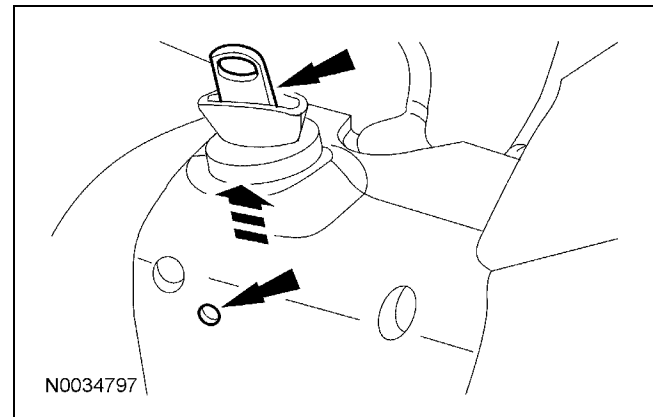
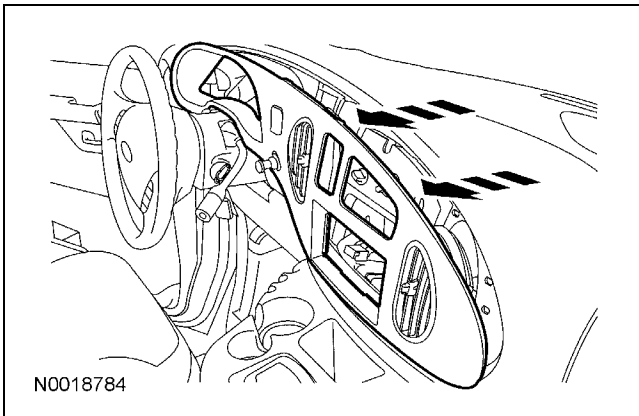
22. Remove the (3) bolts and the headlamp switch.
 - Disconnect the electrical connector.
23. Remove the ignition switch lock cylinder.
 - Insert the ignition key into the lock cylinder and turn the ignition switch to the RUN position.
 - Push the ignition switch lock cylinder release tab with a punch while pulling out the ignition switch lock cylinder.

20. Remove the (2) instrument cluster finish panel screws.



NOTICE: To avoid damage to the instrument cluster finish panel, pull the panel forward just enough to access the electrical connectors before completely removing the panel.

21. Remove the instrument cluster finish panel.
 - Disconnect the electrical connectors.



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

Dipole Antenna Mounting

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

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

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

INSTALLATION (Continued)

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

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

Install The Dipole Antenna

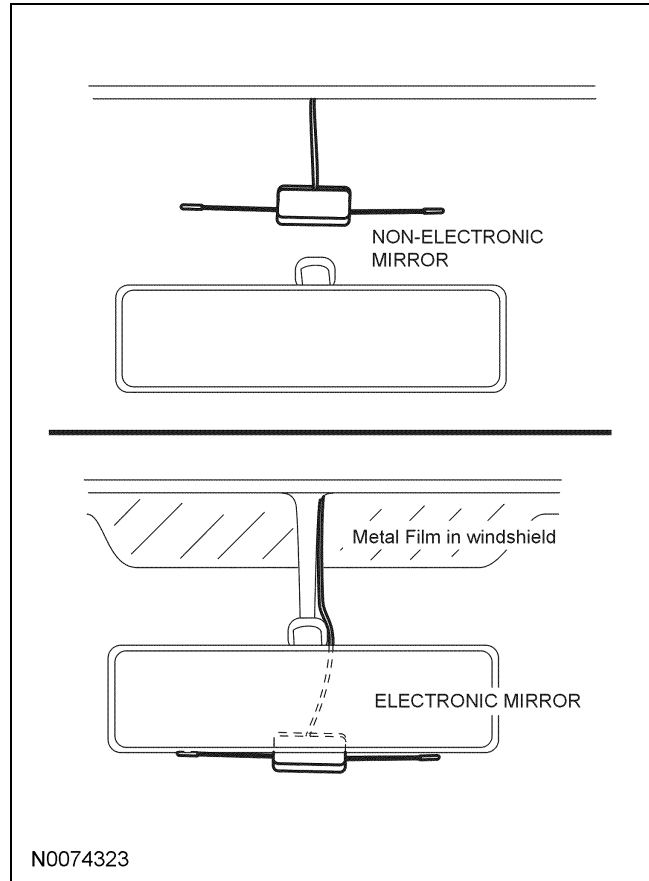
27. Clean the mounting surface using an alcohol base solution and a clean cloth.

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

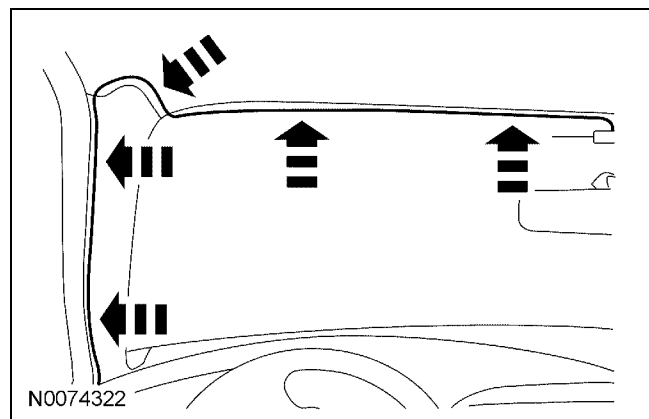
NOTE: Make sure that the long wire on the antenna is pointing toward the top of the windshield since this wire will be routed along the headliner.

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

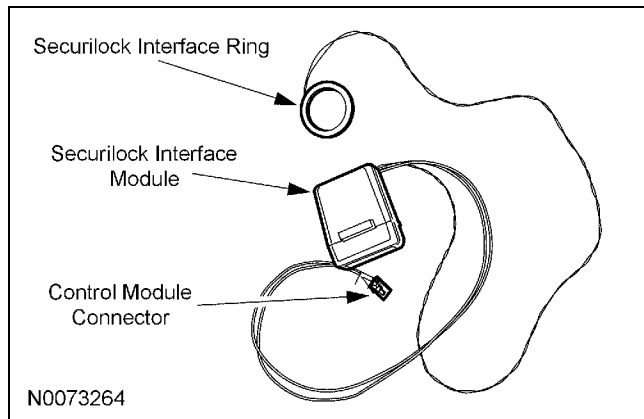
Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the windshield.



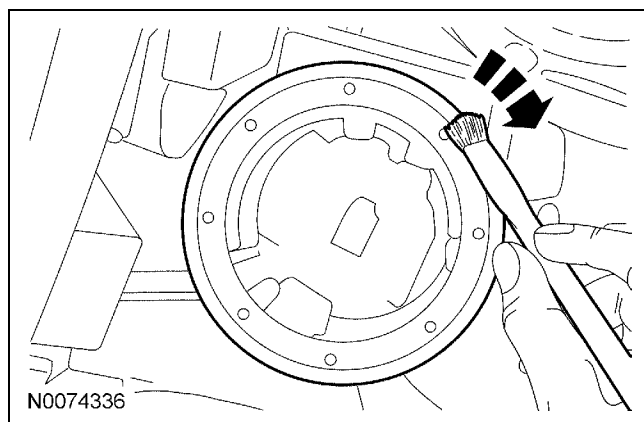
29. Route the dipole antenna cable along the headliner and down the A pillar toward the floor. The wire can be tucked behind the headliner without removing or loosening any of the trim panels.



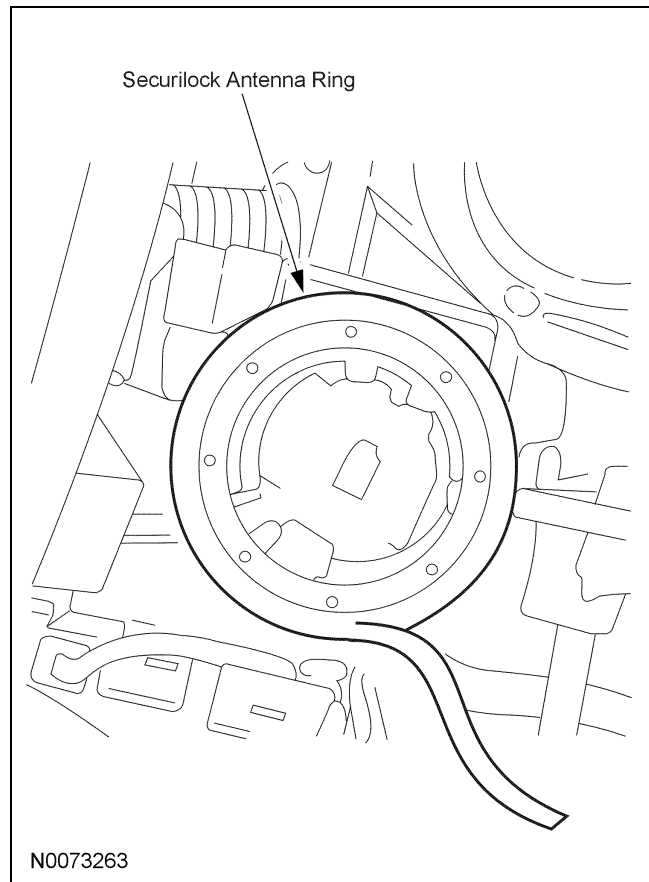
30. Route the ring of the SECURILOCK interface antenna lead up along the steering column to the PATS transceiver location.

INSTALLATION (Continued)

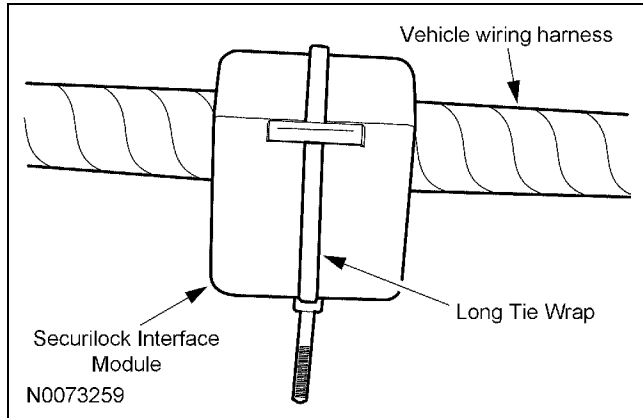
31. Following the directions on the supplied tube of adhesive primer, apply a thin coating around the transceiver antenna coil and allow to dry for approximately 5 minutes.



32. **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**

33. **NOTE:** Do not mount the SECURILOCK Interface Module to or within 3'' of a metal surface, including any underdash brackets, or in the knee bolster area.
 Mount the SECURILOCK Interface Module to and underdash wiring harness using one of the supplied long tie wraps.
34. **NOTICE:** Do not attach the harness to the steering column.
 Route the harness and connector to the module mounting location.

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

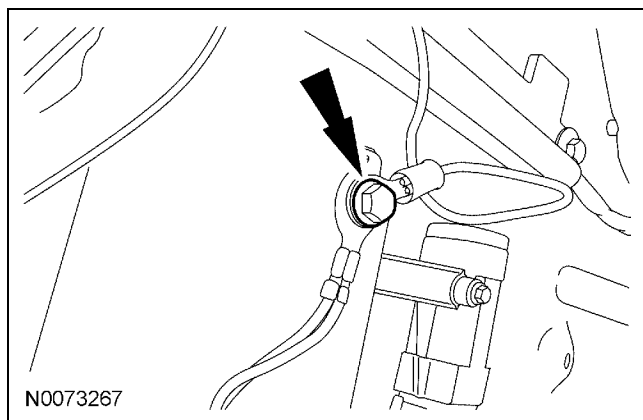
35. Install the ignition lock cylinder.
36. Place the remote start module and harness assembly in the vehicle.

Identify Circuit Wires For Connections

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

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

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



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

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

Identify the Pink/Light Green ignition circuit wire at the Ignition Switch.

39. Connect the Pink wire from the control module harness to the Pink/Light Green ignition circuit wire at the Ignition Switch.

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

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

Identify the Grey/Yellow heater circuit wire at the Ignition Switch.

41. Connect the Orange wire from the control module harness to the Grey/Yellow heater circuit wire at the Ignition Switch.

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

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

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

43. Connect the Violet wire from the control module harness to the harness White/Pink starter circuit wire at the Ignition Switch.

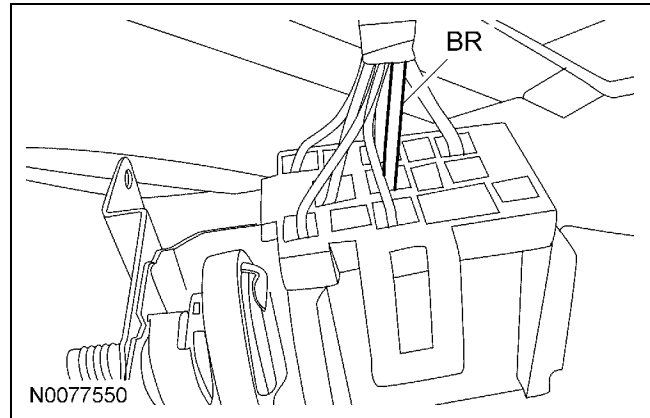
44. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the key is in the ignition lock cylinder.

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

Identify the Black/Pink Key-in-Sense circuit wire at the steering column harness 6 way connector.

INSTALLATION (Continued)

45. Connect the Black/White wire from the control module to the Black/Pink Key-in-Sense circuit wire at the steering column harness 6 way connector.
46. **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 6 way connector.
47. Connect the Brown/Black wire from the control module to the Dark Blue horn circuit wire at the steering column harness 6 way connector.
48. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V while depressing the brake pedal.
A logic probe will show ground on the correct wire, then show power while depressing the brake pedal.
NOTE: Alternate color and location: Light Green located in the driver kick panel.
Identify the Dark Green brake switch circuit wire at the brake switch.
49. Connect the Brown wire from the control module to the Dark Green brake switch circuit wire at the brake switch.
50. **NOTE:** A DVOM connected to the correct wire will show 0V with the switch in the OFF position and 12V with the switch in the parking lights ON position.
A logic probe connected to the correct wire will show ground with the switch in the OFF position and power with the switch in the parking lights ON position.
Identify the Brown parking lights on circuit wire at the headlight switch.



51. Connect the White wire from the control module to the Brown parking lights on circuit wire at the headlight switch.
52. **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 driver kick panel.
53. Connect the Green/Violet wire from the remote start module harness to the Black/Light Blue dome light circuit wire at the driver kick panel.

Vehicles With Factory RKE

54. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the door lock switch is pressed.
A logic probe will show open on the correct wire, then show ground when the door lock switch is pressed.
Identify the Pink/Yellow power door lock circuit wire at the driver kick panel.

INSTALLATION (Continued)

55. Connect the Blue wire from the control module to the Pink/Yellow power door lock circuit at the driver kick panel.
56. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the door unlock switch is pressed.
A logic probe will show open on the correct wire, then show ground when the door unlock switch is pressed.
Identify the Pink/Light Green power door unlock circuit wire at the driver kick panel.
57. Connect the Green wire from the control module to the Pink/Light Green power door unlock circuit at the driver kick panel.
58. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V while depressing the door unlock switch.
A logic probe will show ground on the correct wire, then show power while depressing the door unlock switch.
Identify the Pink/Orange door unlock circuit wire at the driver kick panel.
59. Connect the Light Green wire from the control module harness to the Pink/Orange door unlock circuit wire at the driver kick panel.
60. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V while depressing the door lock switch.
A logic probe will show ground on the correct wire, then show power while depressing the door lock switch.
Identify the Pink/Black lock motor circuit wire at the driver kick panel.
61. Connect the White/Blue wire from the control module harness to the Pink/Black lock motor circuit wire at the driver kick panel.

62. **NOTE:** Skip this step if Optional/Feature - Driver Priority unlock is installed.
NOTE: A DVOM connected to the correct wire will show 0V, then show 12V while depressing the door unlock switch.
A logic probe will show ground on the correct wire, then show power while depressing the door unlock switch.
Identify the Red/Orange driver door unlock motor circuit wire at the driver kick panel.
63. Connect the Brown wire from the control module harness to the Red/Orange driver door unlock motor circuit wire at the driver kick panel.

Vehicles W/O Factory RKE

NOTE: Two relays and two harnesses are required.

64. Prepare the relay harnesses.
65. Connect the following wires to the circuit 87 Yellow wire of one of the relay harnesses approximately 8 inches from the connector
- Connect the circuit 86 Black wires from both relay harnesses.
 - Connect the circuit 87 Yellow wire from remaining relay harness.
66. **NOTE:** Relay one is for the door lock.
NOTE: A DVOM connected to the correct wire will show 0V, then show 12V while depressing the door lock switch.
A logic probe will show ground on the correct wire, then show power while depressing the door lock switch.
Identify the Brown door lock circuit wire at the driver door jamb boot harness.

INSTALLATION (Continued)

67. Cut the Brown door lock circuit wire at the driver door jamb boot harness.
- Connect the circuit 87a Red wire from the door lock relay to the cut Brown door lock circuit wire leading into the vehicle, at the driver door jamb boot harness.
 - Connect the circuit 30 Blue wire from the door lock relay to the cut Brown door lock circuit wire leading back into the vehicle door, at the driver door jamb boot harness.
68. Connect the Blue wire from the control module harness to the circuit 85 White wire from the door lock relay harness.
69. **NOTE:** Relay two is for the door unlock.
- NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V while depressing the door unlock switch.
- A logic probe will show ground on the correct wire, then show power while depressing the door unlock switch.
- Identify the Red door unlock circuit wire at the driver door jamb boot harness.
70. Cut the Red door unlock circuit wire at the driver door jamb boot harness.
- Connect the circuit 87a Red wire from the door unlock relay to the cut Red door lock circuit wire leading into the vehicle, at the driver door jamb boot harness.
 - Connect the circuit 30 Blue wire from the door unlock relay to the cut Red door unlock circuit wire leading back into the vehicle door, at the driver door jamb boot harness.
71. Connect the Green wire from the control module harness to the circuit 85 White wire from the door unlock relay harness.
72. **NOTE:** A DVOM connected to the correct wire will show 12V with the key in any position.
- A logic probe connect to the correct wire will show power with the key in any position.
- This circuit is always hot.
- Identify the Light Green/Violet fused battery wire at the ignition switch harness.

73. Connect the circuit 87 Yellow wire from both relays to the Light Green/Violet fused battery wire at the ignition switch harness.

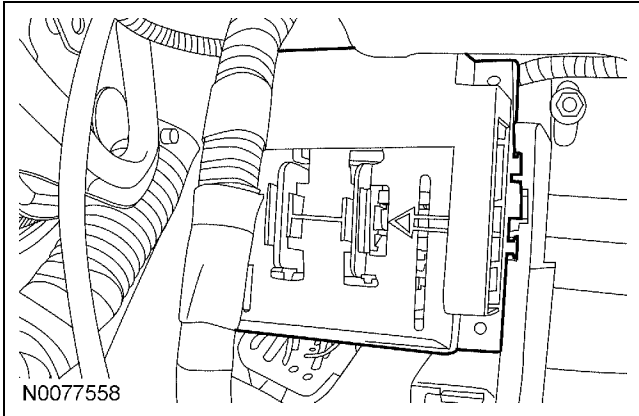
Install The Power Window Interrupt Relay

74. Prepare the relay harness.

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

75. Remove circuit 87 Yellow wires and terminals from the relay harness connectors.
- Release the locking tab and pull the wire and terminal from the connector.
76. Connect the circuit 85 White wire from the power window interrupt relay to the Blue/Black circuit wire from the control module.
77. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the Ignition Switch is in the RUN and START positions.
- A logic probe will show open on the correct wire, then show power when the Ignition Switch is in the RUN and START positions.
- Identify the Pink/Light Green ignition circuit wire at the Ignition Switch.
78. Connect the circuit 86 Black wire from the power window interrupt relay to the Pink/Light Green RUN and START circuit wire at the ignition switch harness.
79. Position the Smart Junction Box (SJB) down to gain access to the SJB wire harness.
80. Identify the Red/Light Blue power window power supply circuit wire at the SJB fuse #42.

INSTALLATION (Continued)



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

- Connect the circuit 30 Blue wire from the power window interrupt relay to the feed side of the Red/Light Blue power window power supply circuit wire at the SJB fuse #42.
- Connect the circuit 87a Red wire from the power window interrupt relay to the switch side of the Red/Light Blue power window power supply circuit wire at the SJB fuse #42.

82. Position back the SJB.

Install The Hood Safety Switch

83. **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.

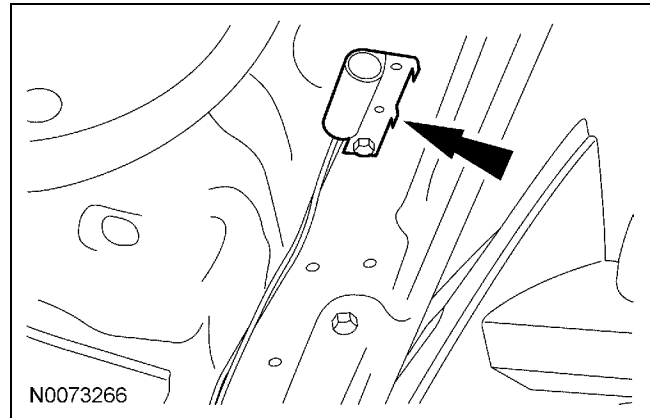
NOTE: The switch should be positioned about 30 degrees below parallel to the ground to accommodate for parking on inclines.

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

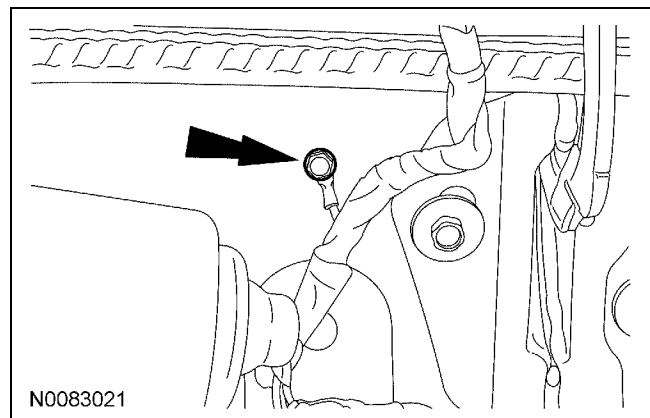
- False alarm trips
- Non-Remote Start events
- Inadvertent shutdown during Remote Start

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

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

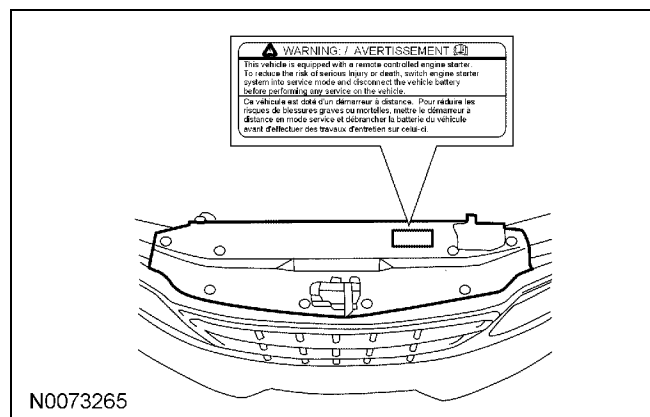


85. Connect hood switch ground wire to a suitable location on the bulkhead.



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

Install the underhood warning label



INSTALLATION (Continued)

87. Route the Gray hood safety switch wire from the RKE/VSS/RMST control module through the bulkhead into the engine compartment and attach to the hood safety switch.
88. Connect the dipole antenna to the RKE/VSS/RMST control module.
89. Connect the SECURILOCK interface module to the RKE/VSS/RMST control module.

Optional Connections/Features - Driver Door Priority Unlock

90. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V while depressing the door unlock switch.
A logic probe will show ground on the correct wire, then show power while depressing the door unlock switch.
Identify the Red/orange door unlock circuit wire at the driver kick panel.
91. Cut the Red/orange door unlock circuit wire at the driver kick panel.
92. Connect the following wires to the side of the Red/orange door unlock circuit wire going to the back of the vehicle.
 - Tan/Red wire from the control module harness.
 - **NOTE:** With factory RKE only
Brown wire from the control module harness.
93. Connect the Tan wire from the control module harness to the remaining side of the cut Red/Orange door unlock circuit wire.

Optional Connections/Features - Headlight Illumination

94. Prepare the relay harness.
 - Remove circuit 87a Red wire and terminals from the relay harness connector.
 - Release the locking tab and pull the wire and terminal from the connector.
95. Connect the circuit 86 Black wire to the circuit 87 Yellow wire.

96. Connect the White wire from the control module harness to the circuit 85 White wire from the relay harness.

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

A logic probe will show ground on the correct wire, then show power when the headlights ON.
Identify the Red/Yellow headlight circuit wire at the headlight switch.

98. Connect the circuit 30 Blue wire from the relay harness to the Red/Yellow headlight circuit wire at the headlight switch.

99. **NOTE:** A DVOM connected to the correct wire will show 12V.

A logic probe will show power on the correct wire.

Identify the Dark Blue/Orange battery circuit wire at the headlight switch.

100. Connect the circuit 86 Black wire of the relay harness to the Dark Blue/Orange battery circuit wire at the headlight switch.

Power Connection

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

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

Identify two Light Green/Violet Battery circuit wire in the ignition switch.

102. Connect the one Red wire from the control module harness to the one Light Green/Violet Battery circuit wire in the ignition switch.

103. Connect the remaining Red wire from the control module harness to the remaining Light Green/Violet Battery circuit wire in the ignition switch.

Program The RKE/VSS/RMST System

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

INSTALLATION (Continued)**Secure RKE/VSS/RMST Harness and Control Module**

105. Use the supplied tie wraps to secure the RKE/VSS/RMST harness wires.

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

To ensure the best performance of the built-in shock sensor, secure the control module at three points to the vehicle.

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

Install Trim

107. If equipped, install the tilt release lever handle.

108. Install the (3) screws and the steering column shroud.

109. Install the (3) bolts and the headlamp switch.

- Connect the electrical connector.

110. Install the instrument cluster finish panel.

- Connect the electrical connectors.

111. Install the (2) instrument cluster finish panel screws.

112. Install the audio unit.

113. Install the headlamp switch bezel.

114. Install the headlamp knob.

115. Install the lower instrument panel steering column cover.

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

GENERAL PROCEDURES

Programming

Programming the Module

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

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

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

NOTE: The remote start override button must be accessible.

Programming Options: Entering Programming Mode

- See chart below for programming information.

Option Bank - 1 Chart (4 - Honks)

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

Option Bank - 2 Chart (5 - Honks)

BANK	OPTIONS	DESCR	LED
2	1	STARTER INTERRUPT	OFF

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

BANK	OPTIONS	DESCR	LED
2	8	DRIVER UNLOCK RELAY	NOTE 2

Option Bank - 3 Chart (6 - Honks)

BANK	OPTIONS	DESCR	LED
3	1	DRIVER PRIORITY UNLOCK	NOTE 2

Option Bank - 4 Chart (7 - Honks)

BANK	OPTIONS	DESCR	LED
4	1	TACHLESS MODE	ON

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

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

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

GENERAL PROCEDURES (Continued)

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

If not please check the following:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GENERAL PROCEDURES (Continued)

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

NOTE: The remote start module is now programmed.


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

Programming the SECURILOCK

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

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

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

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

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

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

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

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

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

25. 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

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

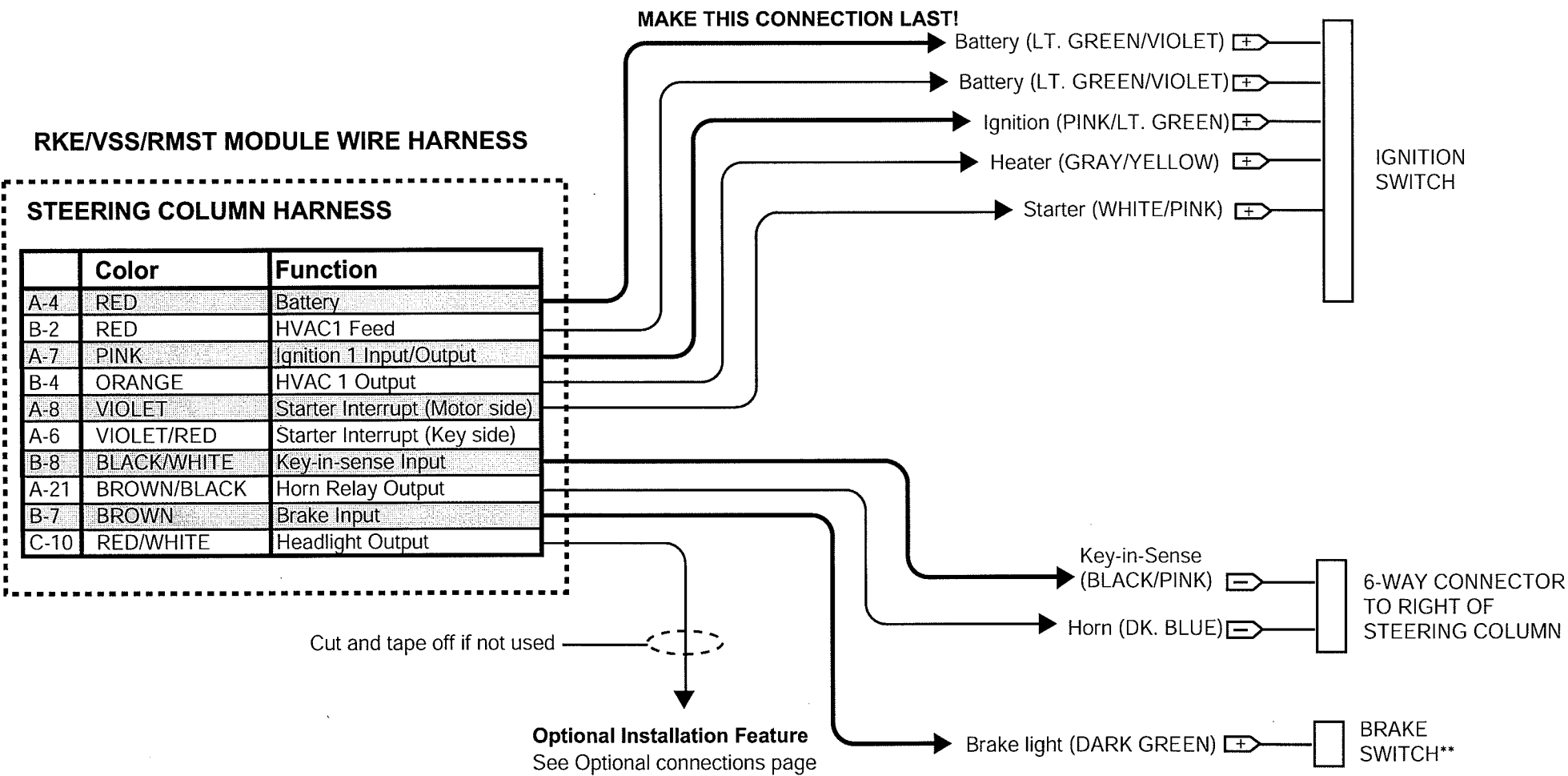
15. **NOTE:** When attempting to remote start your vehicle, the system has several safety checks that it performs. If any of these inputs are present that should not be, the system will respond back to you with several horn "chirps" to help you identify which input is present. These "chirps" will occur 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.

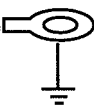
GENERAL PROCEDURES (Continued)

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



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

MAKE THIS CONNECTION FIRST!

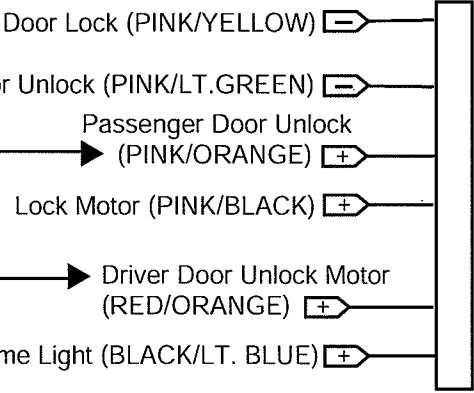


CHASSIS GROUND POINT
IN DRIVERS KICK PANEL

RKE/VSS/RMST MODULE WIRE HARNESS

DRIVERS SIDE KICK PANEL HARNESS

	Color	Function
A-5	BLACK	Ground
A-2	BLUE	Door Lock Output
A-14	GREEN	Door Unlock Output
A-12	LT.GREEN	Unlock Switch Sense Input
A-11	WHITE/BLUE	Arm Input
A-9	BROWN	Disarm Input
A-24	BLUE/GREEN	Driver Door Unlock Output
A-20	GREEN/VIOLET	Door Ajar Switch Input
A-3	BLACK/WHITE	Dome Light Output
A-24	BLUE/GREEN	Driver Door Unlock Output

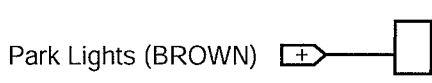


DRIVER SIDE
KICK PANEL

Optional Installation Feature
See Optional connections page

HEADLIGHT SWITCH

	Color	Function
A-1	WHITE	Parking Light Output



HEADLIGHT
SWITCH

'08 E-Series

MAKE THIS CONNECTION FIRST!

CHASSIS GROUND POINT
IN DRIVERS KICK PANEL

RKE/VSS/RMST MODULE WIRE HARNESS

DRIVERS SIDE KICK PANEL HARNESS

	Color	Function
A-5	BLACK	Ground
A-2	BLUE	Door Lock Output
A-14	GREEN	Door Unlock Output
A-24	BLUE/GREEN	Driver Door Unlock Output

Optional Installation Feature
See Optional connections page

DRIVER'S SIDE KICK PANEL HARNESS

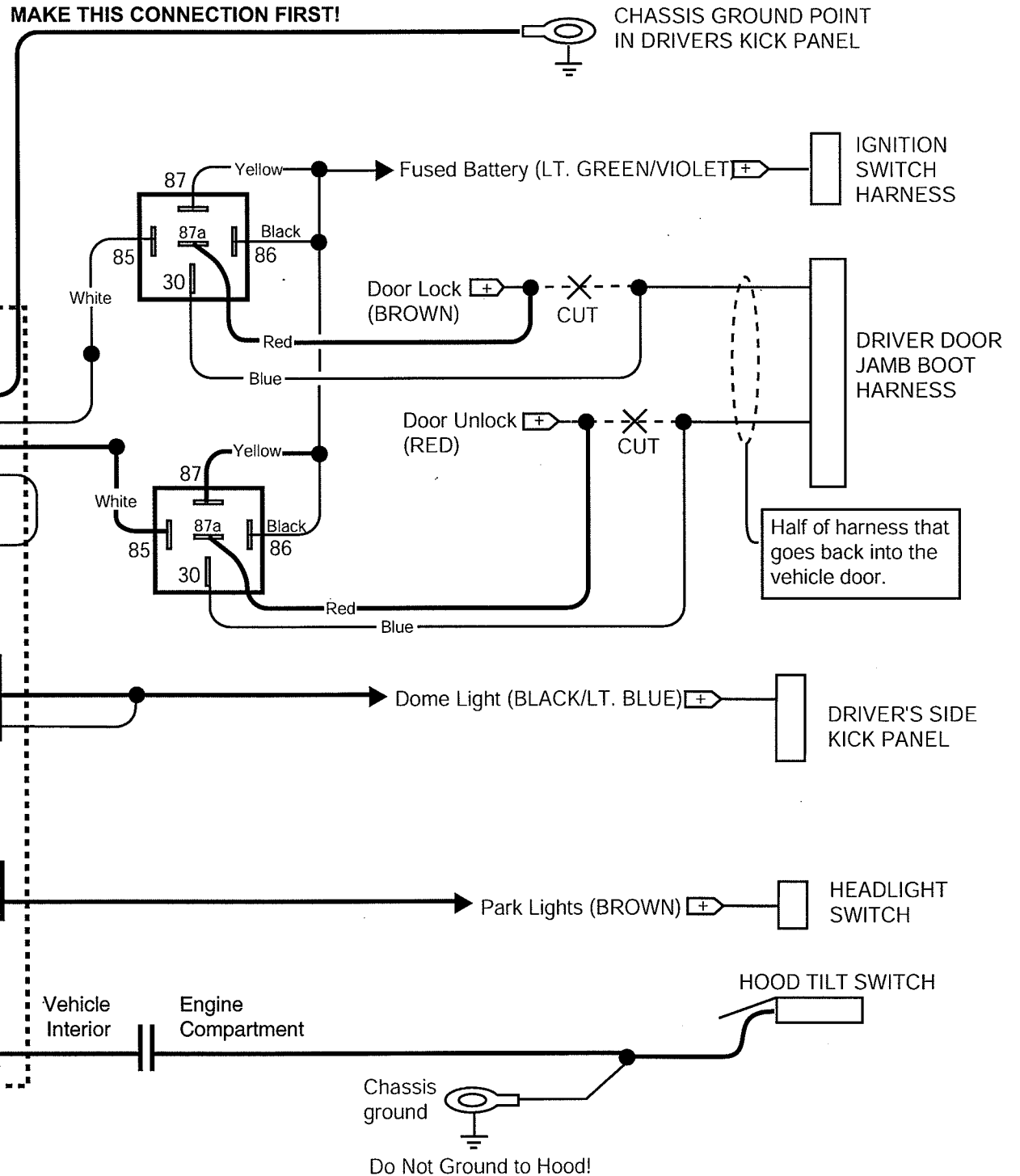
	Color	Function
A-20	GREEN/VIOLET	Door Ajar Switch Input
A-3	BLACK/WHITE	Dome Light Output

HEADLIGHT SWITCH

	Color	Function
A-1	WHITE	Parking Light Output

UNDERHOOD HARNESS

	Color	Function
A-19	GRAY	Hood Open Switch Input



OPTIONAL CONNECTIONS / FEATURES

RKE/VSS/RMST MODULE WIRE HARNESS

DRIVER'S DOOR PRIORITY UNLOCK

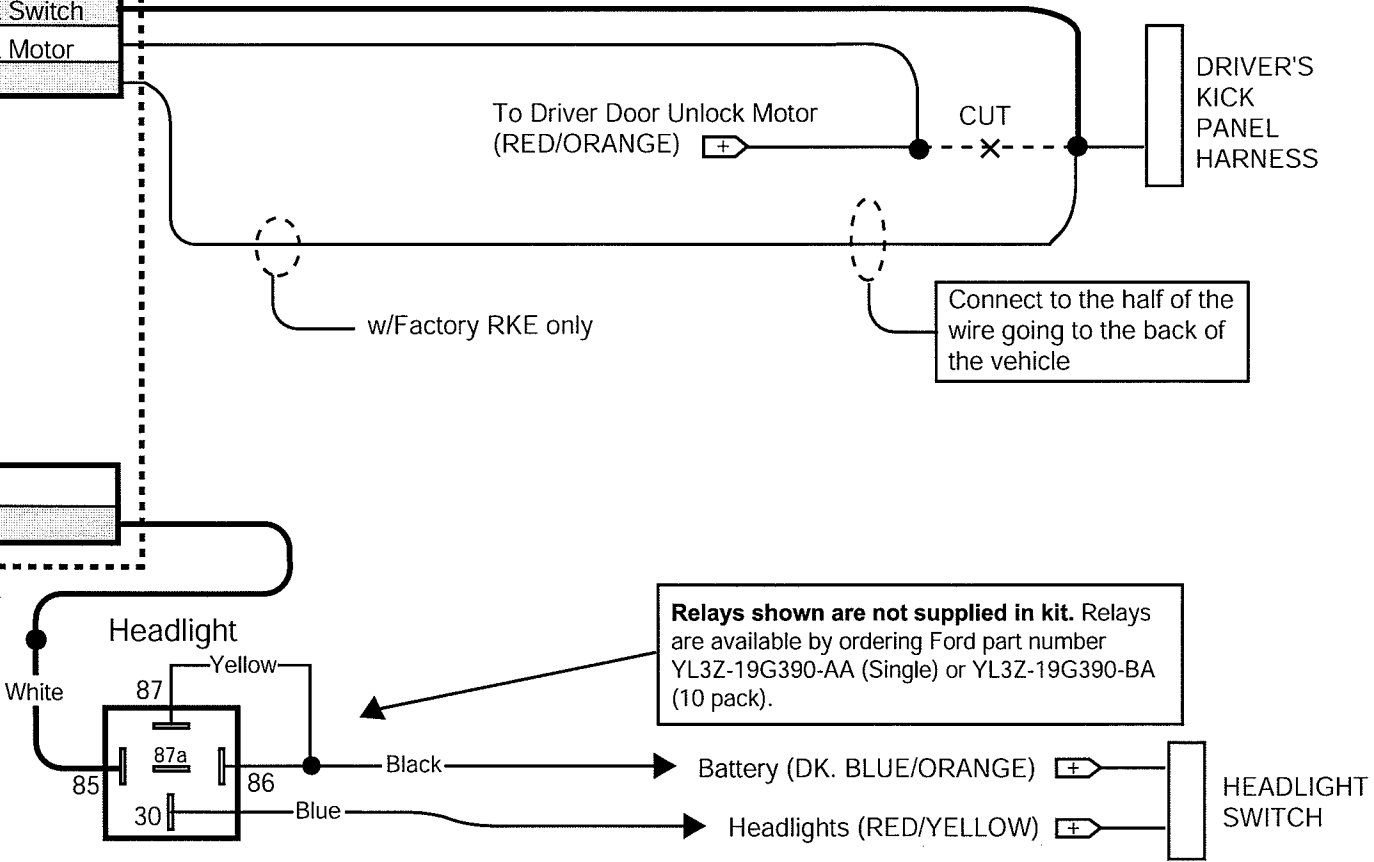
	Color	Function
C-9	TAN/RED	Driver Door Unlock Switch
A-13	TAN	Driver Door Unlock Motor
A-9	BROWN	Disarm Input

HEADLIGHT ILLUMINATION

	Color	Function
C-10	RED/WHITE	Headlight Output

OPTION PROGRAMMING REQUIREMENTS

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



IMPORTANT!
The relay wire colors shown here, are the colors used on the FORD accessory relay kits listed above. Wire colors on other relays may be different!

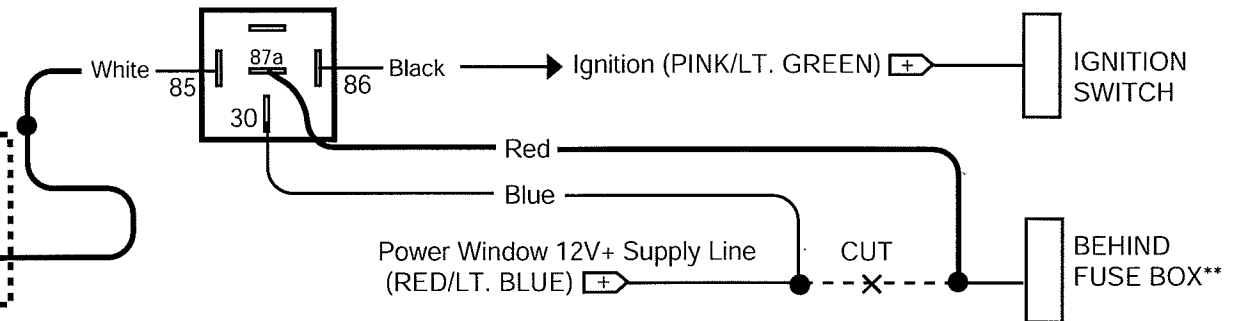
POWER WINDOW INTERRUPT

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

RKE/VSS/RMST MODULE WIRE HARNESS

POWER WINDOW INTERRUPT

	Color	Function
B-10	BLUE/BLACK	Active Output



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

CAUTION: REMOVE YELLOW WIRE AND TERMINAL FROM RELAY SOCKETS

[Manual Table of Contents](#)

RKE/VSS/REMOTE START SYSTEM INSTALLATION

CONTENTS

INSTALLATION

[RKE/VSS/Remote Start](#)

GENERAL PROCEDURES

[Proper Splicing Techniques](#)

[Programming](#)

[Functional Test](#)

[Troubleshooting](#)

[Shock Sensor Setting](#)

WIRING DIAGRAMS

[Vehicle Specific Wiring Diagrams](#)

INSTALLATION

Remote Start

Edge/MKX

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

NOTE: IMPORTANT: This Series 200 kit is NOT recommended for installation on this vehicle because the alarm system will trigger if the Integrated Key fob (if equipped) is used to open the trunk/liftgate without disarming the Series 200 system first. Therefore, it is highly recommended to install the Series 100 system (7L2Z-19G364-AA) instead, which is not equipped with perimeter security.

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

1. Verify correct kit number.

Review RKE/VSS/RMST Installation Kit Contents

NOTE: Use kit number 7L3Z-19G364-AA REMOTE START SYSTEM

NOTE: Kits are vehicle specific and are not interchangeable.

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

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

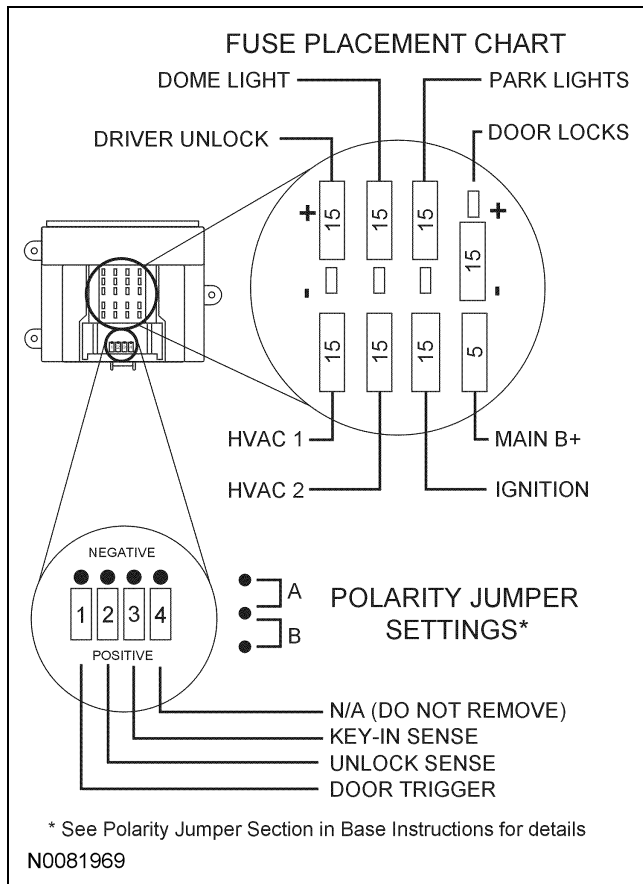
QUANTITY	DESCRIPTION
1	MODULE ASSEMBLY
1	RKE/VSS/RMST SOFTWARE CARTRIDGE ASSEMBLY
2	6 BUTTON POWERCODE TRANSMITTER

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

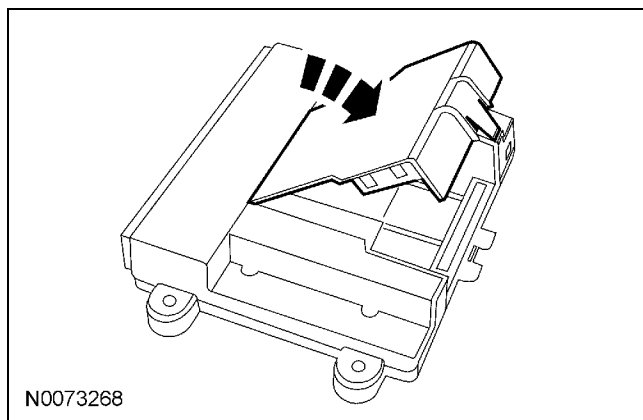
QUANTITY	DESCRIPTION
3	WIRING HARNESS ASSEMBLIES
1	DIPOLE ANTENNA
1	HOOD SAFETY SWITCH ASSEMBLY
1	INSTALLATION PARTS BAG
1	FUSE PARTS BAG
1	OPERATORS INSTRUCTIONS
1	OPERATORS QUICK REFERENCE WALLET CARD
1	UNDERHOOD WARNING LABEL
1	SECURILOCK INTERFACE KIT (SOLD SEPARATELY AND REQUIRED FOR VEHICLES W/PATS)

Module Preparation

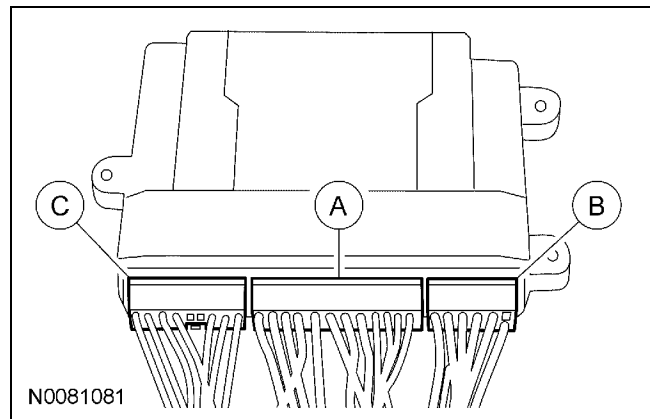
3. Place the supplied fuses into the power distribution block on the RKE/VSS/RMST control module.
 - Move the polarity jumpers to their proper locations on the control module, see illustration.

INSTALLATION (Continued)

4. Place the software cartridge onto the control module.



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



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

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

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

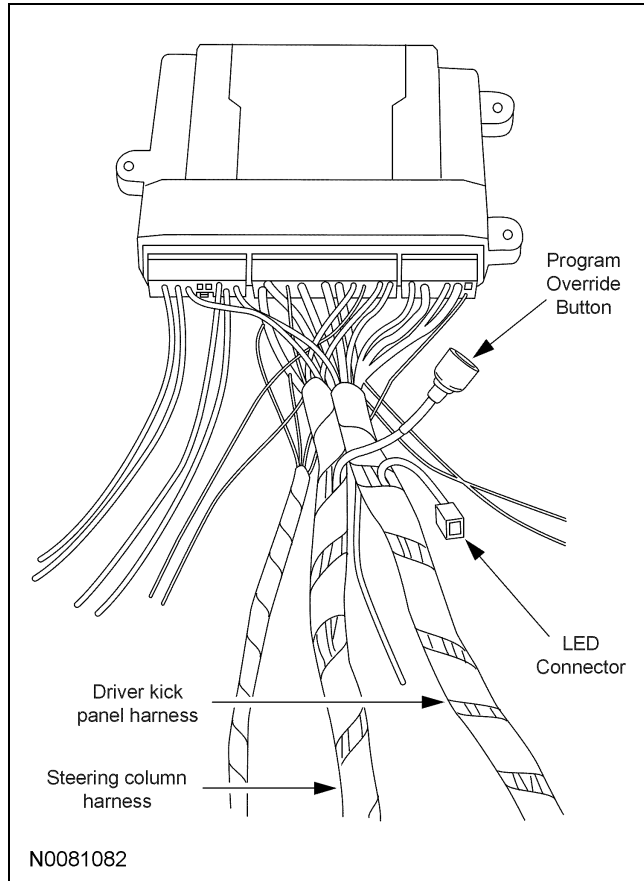
- B-2 Red wire in the B connector.

7. Splice the following wires to the A-20 Green/Violet wire in the A connector of the control module approximately 8 inches from the connector

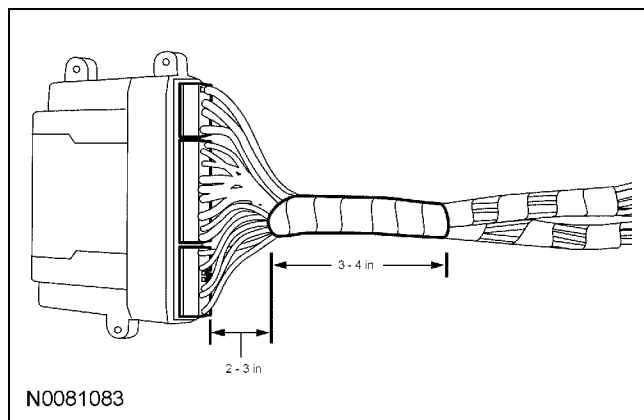
- A-3 Black/White wire in the A connector.

8. 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)

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

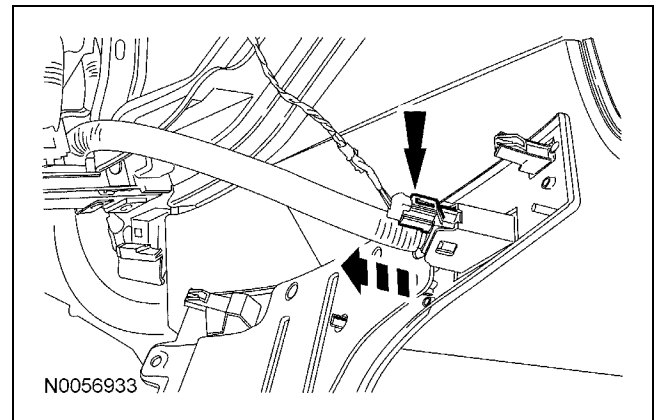
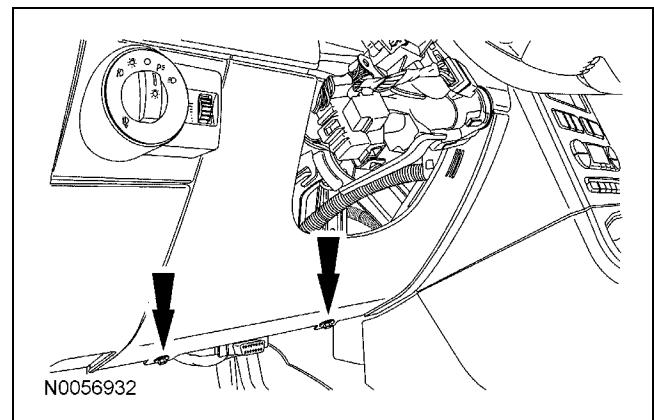
**Vehicle Preparation**

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

NOTE: The top of the instrument panel steering column cover is held in by tabs that clip into the instrument panel.

12. Remove the 2 instrument panel steering column cover screws.
- Detach the instrument panel steering column cover by pulling straight outward.
13. If equipped, disconnect the electrical connector and hose from the temperature sensor.
- Remove the instrument panel steering column cover.



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

Dipole Antenna Mounting

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

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

INSTALLATION (Continued)

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

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

Install The Dipole Antenna

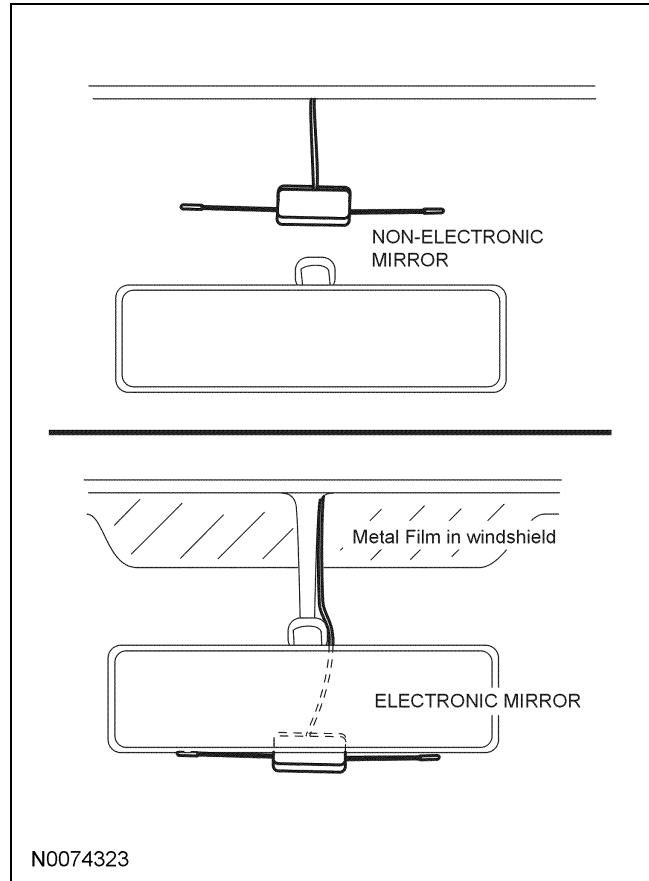
16. Clean the mounting surface using an alcohol base solution and a clean cloth.

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

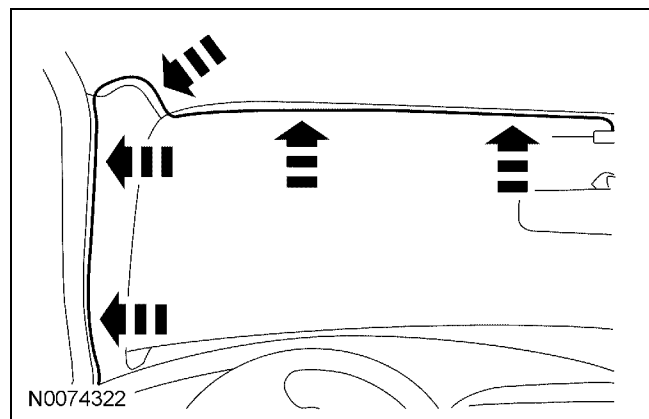
NOTE: Make sure that the long wire on the antenna is pointing toward the top of the windshield since this wire will be routed along the headliner.

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

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

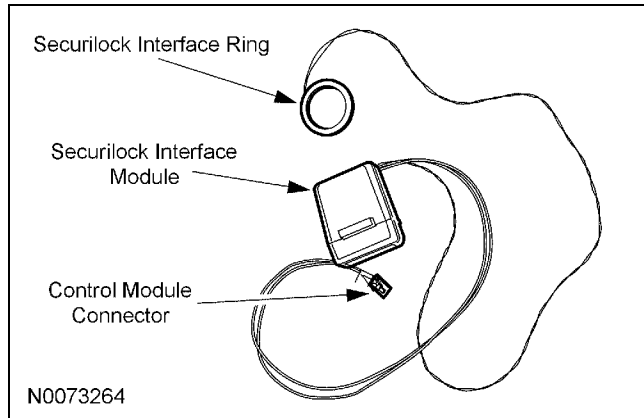


18. Route the dipole antenna cable along the headliner and down the A pillar toward the floor. The wire can be tucked behind the headliner without removing or loosening any of the trim panels.

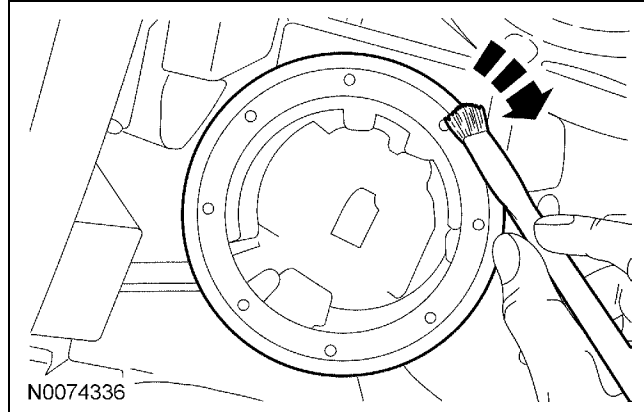


INSTALLATION (Continued)**Install The Securilock Interface Kit**

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



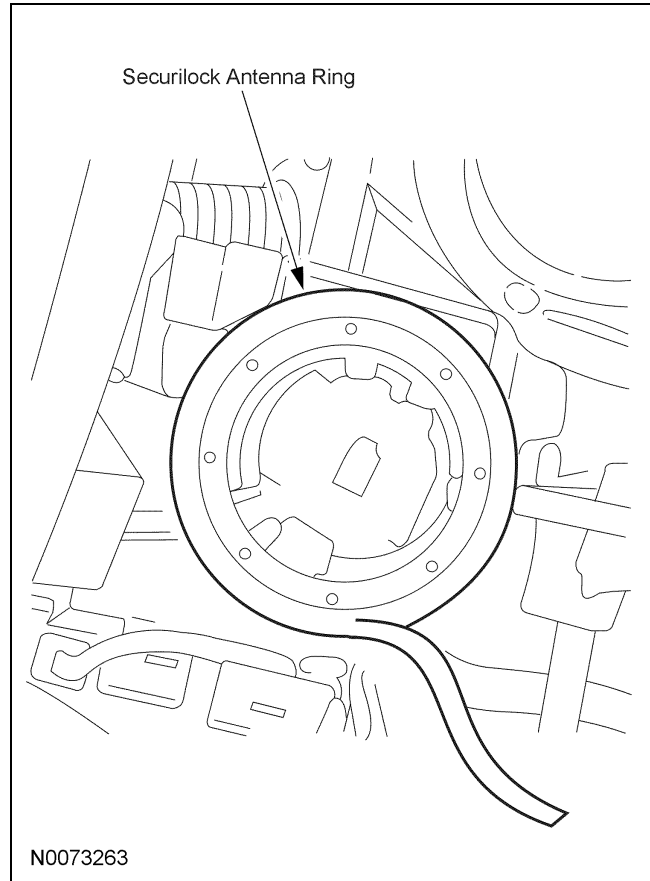
20. Following the directions on the supplied tube of adhesive primer, apply a thin coating around the transceiver antenna coil and allow to dry for approximately 5 minutes.



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

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

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

**Install The Securilock Interface Module**

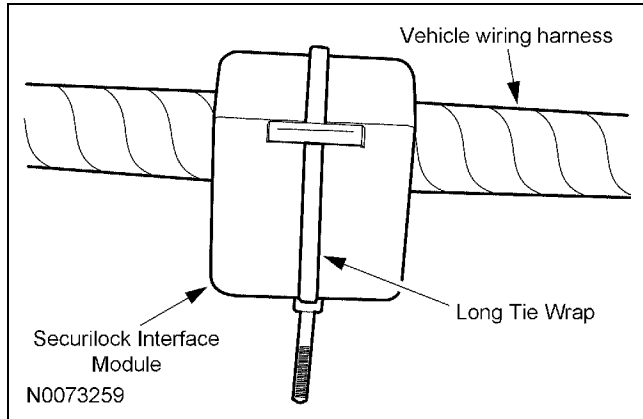
22. **NOTE:** Do Not mount the SECURILOCK Interface Module to or within 3'' of a metal surface, including any underdash brackets, or in the knee bolster area.

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

INSTALLATION (Continued)

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

Route the harness and connector to the module mounting location.

**Install the Control Module and Harness Assembly**

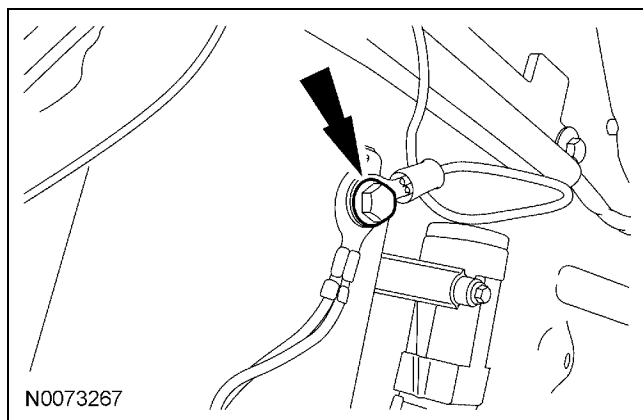
24. Place the control module and harness assembly in the vehicle.

Identify Circuit Wires For Connections

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

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

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



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

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

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

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

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

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

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

29. Connect the Orange wire from the control module harness to the Violet/Green heater circuit wire at the ignition switch harness.

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

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

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

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

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

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

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

INSTALLATION (Continued)

33. Connect the Violet wire from the control module harness to the Blue/White starter circuit wire at the ignition switch harness.

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.

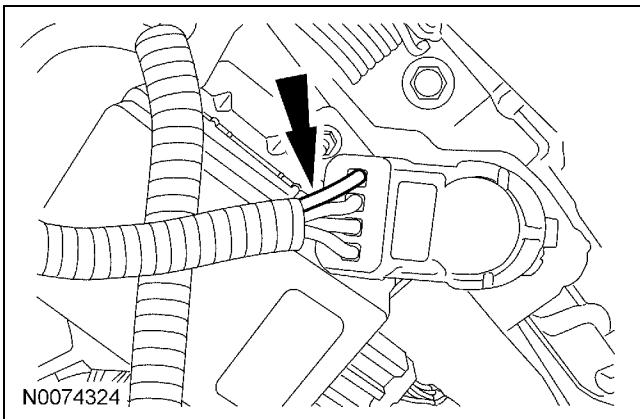
Identify the Blue/White horn circuit wire at the steering column harness.

35. Connect the Brown/Black wire from the control module harness to the Blue/White horn circuit wire at the steering column harness.

36. **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 driver kick panel harness.



37. Connect the Brown wire from the control module harness to the Violet/White brake switch circuit wire at the driver kick panel harness.

38. **NOTE:** A DVOM connected to the correct wire will show 12V, when the Headlight Switch is in the park lamp position, then show 0V when the Headlight Switch is OFF.

A logic probe will show power on the correct wire when the Headlight Switch is in the park lamp position, then show ground when the Headlight Switch is OFF.

Identify the Violet/White parking light on circuit wire at the driver kick panel.

39. Connect the White wire from the control module harness to the Violet/White parking light circuit at the driver kick panel.

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.

Identify the Gray/Violet dome light circuit wire at the driver kick panel.

41. Connect the Green/Violet wire from the control module harness to the Gray/Violet dome light circuit at the driver kick panel harness.

42. **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 Gray/Brown power door lock motor circuit wire at the driver kick panel.

43. Connect the White/Blue wire from the control module harness to the Gray/Brown power door lock motor circuit at the driver kick panel.

INSTALLATION (Continued)

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

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

Identify the Gray/Yellow power door lock circuit wire at the driver kick panel.

45. Connect the Blue wire from the control module harness to the Gray/Yellow power door lock circuit at the driver kick panel.

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

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

Identify the Violet/Gray door unlock circuit wire at the driver kick panel.

47. Connect the Green wire from the control module harness to the Violet/Gray door unlock circuit wire at the driver kick panel.

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

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

Identify the Violet/Gray all door unlock motor circuit wire at the driver kick panel.

49. Connect the Light Green wire from the control module harness to the Violet/Gray all door unlock motor circuit wire at the driver kick panel.

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

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

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

51. Connect the Brown wire from the control module harness to the Blue/Green driver door unlock motor circuit wire at the driver kick panel.

52. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the factory disarm switch is activated.

A logic probe will show power on the correct wire, then show ground when the factory disarm switch is activated.

Identify the Violet/Brown factory disarm circuit wire at the driver kick panel.

53. Connect the Light Green/Black wire from the control module harness to the Violet/Brown factory disarm circuit wire at the driver kick panel.

54. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the hatch release switch is pressed.

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

Identify the Gray/Yellow hatch release circuit wire at the instrument panel liftgate switch.

55. Connect the Blue/Green wire from the control module harness to the Gray/Yellow hatch release circuit wire at the instrument panel liftgate switch.

Optional Connections/Features - Driver Door Priority Unlock

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

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

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

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

57. Cut the Blue/Green driver door unlock motor circuit wire at the driver kick panel.

INSTALLATION (Continued)

58. Connect the Brown wire from the control module harness to the cut Blue/Green driver door unlock motor circuit wire going to back towards the Smart Junction Box SJB at the driver kick panel.
59. Splice the Tan wire from the control module harness to the cut Blue/Green driver door unlock motor circuit wire going forward away from the Smart Junction Box SJB at the driver kick panel at the driver kick panel

Optional Connections Headlight Output Control Relay

60. Prepare the relay harness.
61. Remove circuit 87 Yellow wire and terminal from the relay harness connector.
- Release the locking tab and pull the wire and terminal from the connector.
62. **NOTE:** A DVOM connected to the correct wire will show 12V with the key in any position. A logic probe connect to the correct wire will show power with the key in any position. Identify the Blue/Red Battery circuit wire in the ignition switch harness.
63. Connect the circuit 86 Black wire from the relay to the Blue/Red Battery ignition wire in the ignition switch harness.
64. Identify the Black/Violet circuit wire at the headlight switch connector C1-1.
65. Cut the black/Violet circuit wire at the headlight switch connector C1-1.
- Connect the circuit 87a Red wire from the relay to the cut Black/Violet circuit wire coming from the connector.
 - Connect the circuit 30 Blue wire from the relay to the cut Black/Violet circuit wire coming from the harness.
66. Connect the circuit 85 White wire from the relay to the Red/White wire from the control module.

Install The Hood Safety Switch

67. **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.

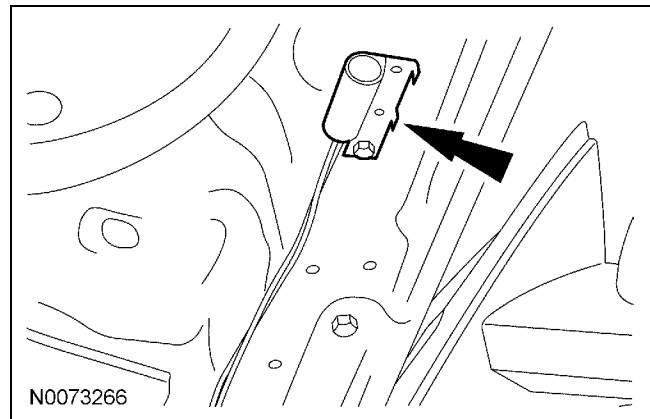
NOTE: The switch should be positioned about 30 degrees below parallel to the ground to accommodate for parking on inclines.

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

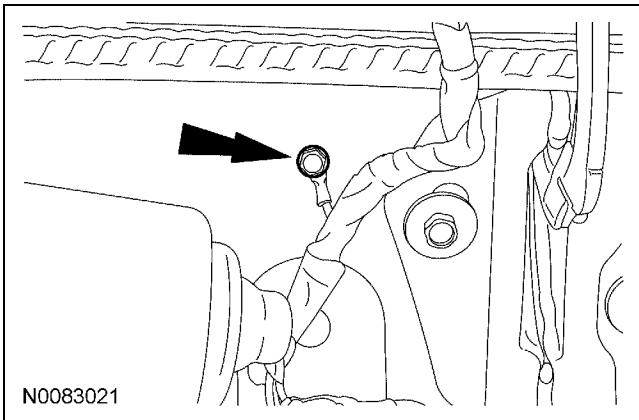
Locate an easy to access area near the driver side hood hinge and install the hood safety switch using the supplied metal screws.

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



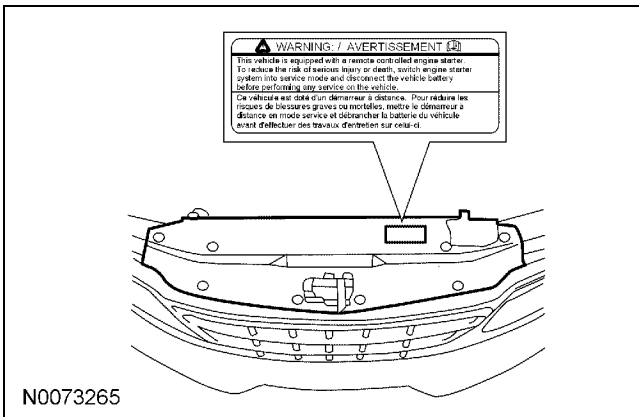
INSTALLATION (Continued)

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



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

Install the underhood warning label



71. Route the Gray hood safety switch wire from the RKE/VSS/RMST control module through the bulkhead into the engine compartment and attach to the hood safety switch.
72. Connect the dipole antenna to the RKE/VSS/RMST control module.
73. Connect the SECURILOCK interface module to the RKE/VSS/RMST control module.

Power Connection

74. **NOTE:** A DVOM connected to the correct wire will show 12V with the key in any position. A logic probe will show power on the correct wire with the key in any position. Identify the Blue/Red Battery circuit wire in the ignition switch harness.
75. Connect the Red wire from the remote start module harness to the Blue/Red Battery circuit wire in the ignition switch harness.

Program The RKE/VSS/RMST System

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

Secure RKE/VSS/RMST Harness and Control Module

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

Install Trim

79. Install the left hand scuff plate and cowl trim panel.
80. If equipped, connect the electrical connector and hose to the temperature sensor.
- Install the instrument panel steering column cover.
81. Install the 2 instrument panel steering column cover screws.
- Attach the instrument panel steering column cover by pushing straight inward.

INSTALLATION (Continued)

82. Install the lower steering column shroud, install the 3 screws.
83. Install the upper steering column shroud.
-

GENERAL PROCEDURES

Programming

Programming the Module

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

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

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

NOTE: The remote start override button must be accessible.

Programming Options: Entering Programming Mode

- See chart below for programming information.

Option Bank - 1 Chart (4 - Honks)

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

Option Bank - 2 Chart (5 - Honks)

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

Option Bank - 3 Chart (6 - Honks)

BANK	OPTIONS	DESCR	LED
3	1	DRIVER PRIORITY UNLOCK	NOTE 2

Option Bank - 4 Chart (7 - Honks)

BANK	OPTIONS	DESCR	LED
4	1	TACHLESS MODE	ON

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

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

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

GENERAL PROCEDURES (Continued)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

NOTE: The remote start module is now programmed.

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

Programming the SECURILOCK

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

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


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

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

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

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

GENERAL PROCEDURES (Continued)

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

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

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

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

23. 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

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)

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

'08 Edge / MKX

RKE/VSS/RMST MODULE WIRE HARNESS

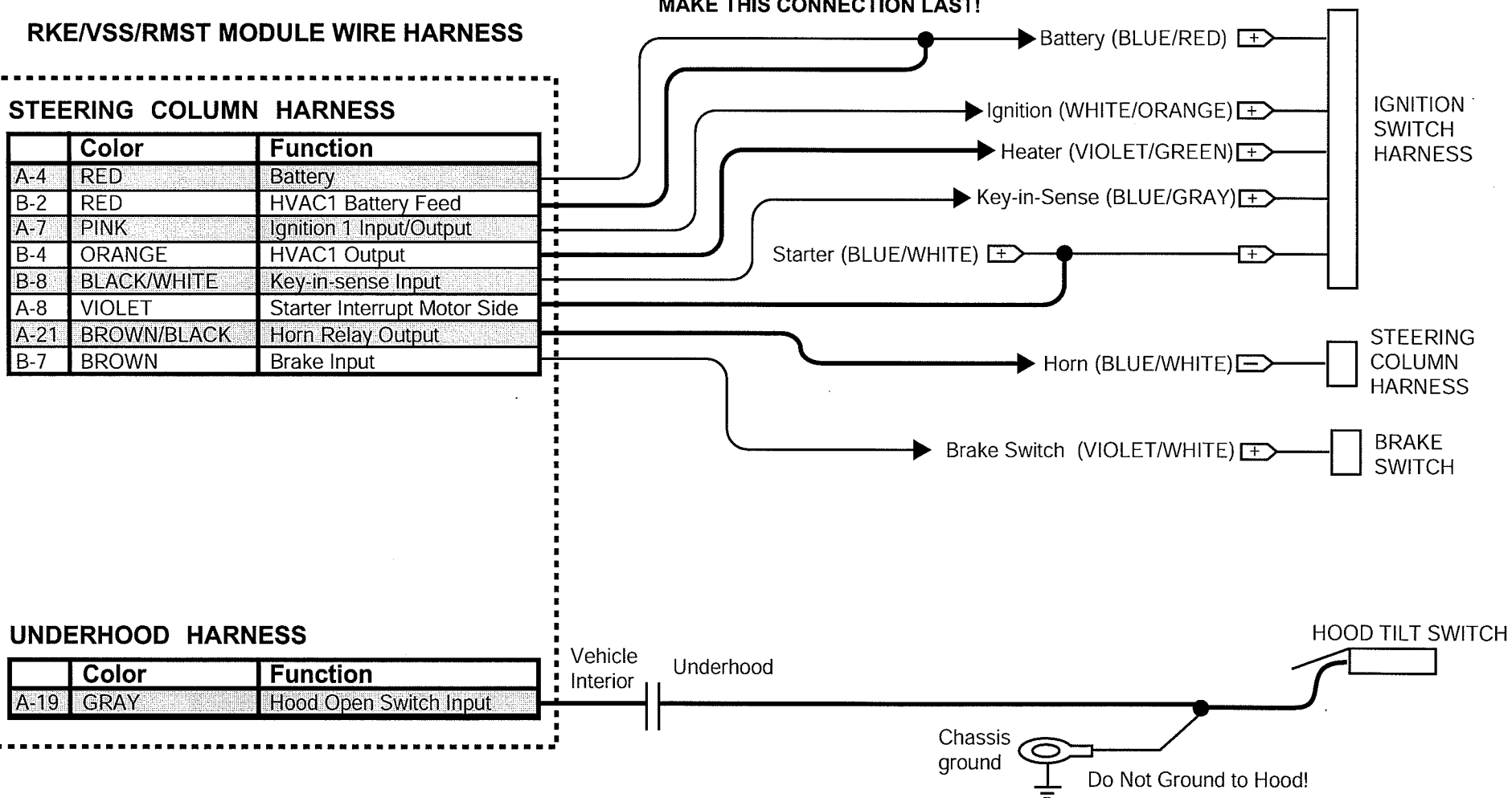
STEERING COLUMN HARNESS

	Color	Function
A-4	RED	Battery
B-2	RED	HVAC1 Battery Feed
A-7	PINK	Ignition 1 Input/Output
B-4	ORANGE	HVAC1 Output
B-8	BLACK/WHITE	Key-in-sense Input
A-8	VIOLET	Starter Interrupt Motor Side
A-21	BROWN/BLACK	Horn Relay Output
B-7	BROWN	Brake Input

UNDERHOOD HARNESS

	Color	Function
A-19	GRAY	Hood Open Switch Input

MAKE THIS CONNECTION LAST!



'08 Edge / MKX

RKE/VSS/RMST MODULE WIRE HARNESS

DRIVER'S SIDE KICK PANEL HARNESS

	Color	Function
A-5	BLACK	Ground

KICK PANEL HARNESS

	Color	Function
A-1	WHITE	Parking Light Output
A-3	BLACK/WHITE	Dome Light Output
A-20	GREEN/VIOLET	Door Ajar Switch Input
A-11	WHITE/BLUE	Arm Input
A-2	BLUE	Door Lock Output
A-14	GREEN	Door Unlock Output
A-12	LT. GREEN	Unlock Switch Sense Input
A-9	BROWN	Disarm Input
C-4	LT GREEN/BLACK	Factory Alarm Disarm
A-24	BLUE/GREEN	Driver Door Unlock Output

MAKE THIS CONNECTION FIRST!

CHASSIS GROUND STUD
IN DRIVERS KICK PANEL

Parking Lights On (VIOLET/WHITE) +

DRIVERS
KICK PANEL
OR
SJB C4-20

Dome Light (GRAY/VIOLET) +

Lock All Motors (GRAY/BROWN) +

Door Lock Switch
(GRAY/YELLOW) -

Door Unlock Switch (VIOLET/GRAY) -

All Door Unlock Motors (VIOLET/GRAY) +

Driver's Door Unlock Motor
(BLUE/GREEN) +

Factory Alarm Disarm
(VIOLET/BROWN) -

Power Lift Gate (GRAY/YELLOW) -

DRIVERS
KICK PANEL

LIFT GATE
SWITCH

OPTIONAL CONNECTIONS / FEATURES

OPTION PROGRAMMING REQUIREMENTS

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

RKE/VSS/RMST MODULE WIRE HARNESS

DRIVER'S DOOR PRIORITY UNLOCK

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

To Driver Door Unlock Motor
(BLUE/GREEN) +

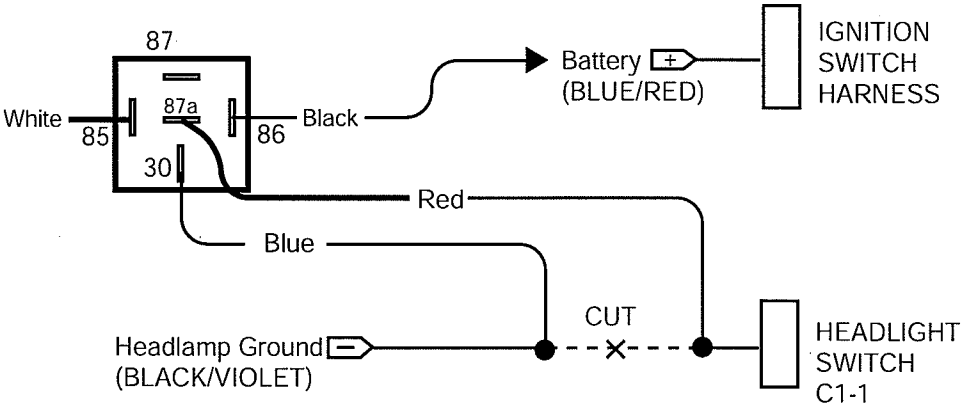
CUT

DRIVERS
KICK PANEL

Connect to the half of the
wire going to the back
towards the SJB.

HEADLIGHTS/REAR DEFROSTER

	Color	Function
C-10	RED/WHITE	Headlight Output



RKE/VSS/REMOTE START SYSTEM INSTALLATION

CONTENTS

INSTALLATION

[RKE/VSS/Remote Start](#)

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[Programming](#)

[Functional Test](#)

[Troubleshooting](#)

[Shock Sensor Setting](#)

WIRING DIAGRAMS

[Vehicle Specific Wiring Diagrams](#)

INSTALLATION

Remote Start

Escape/Mariner

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

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

1. Verify correct kit number.

Review RKE/VSS/RMST Installation Kit Contents

NOTE: Use kit number 7L3Z-19G364-AA
REMOTE START SYSTEM

NOTE: Kits are vehicle specific and are not interchangeable.

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

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

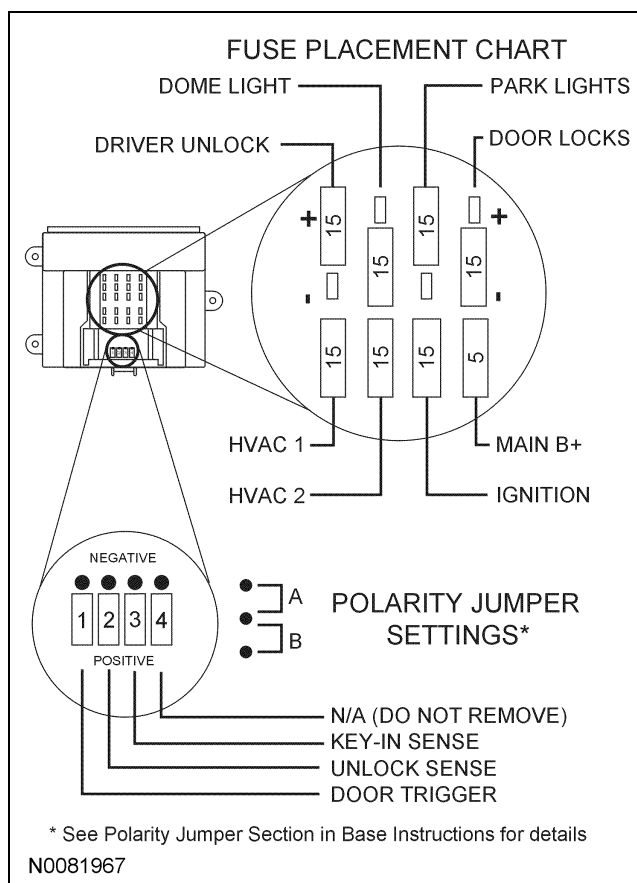
QUANTITY	DESCRIPTION
1	MODULE ASSEMBLY
1	RKE/VSS/RMST SOFTWARE CARTRIDGE ASSEMBLY
2	6 BUTTON POWERCODE TRANSMITTER
3	WIRING HARNESS ASSEMBLIES
1	DIPOLE ANTENNA
1	HOOD SAFETY SWITCH ASSEMBLY
1	INSTALLATION PARTS BAG
1	FUSE PARTS BAG
1	OPERATORS INSTRUCTIONS

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

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

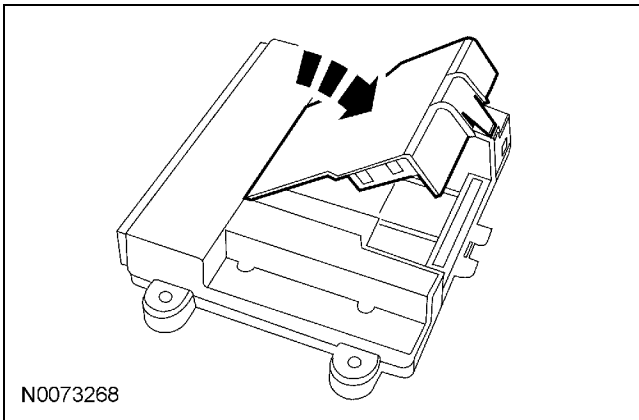
Module Preparation

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

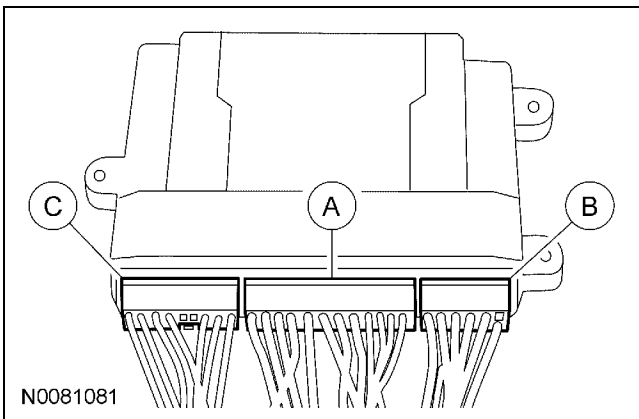


INSTALLATION (Continued)

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



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



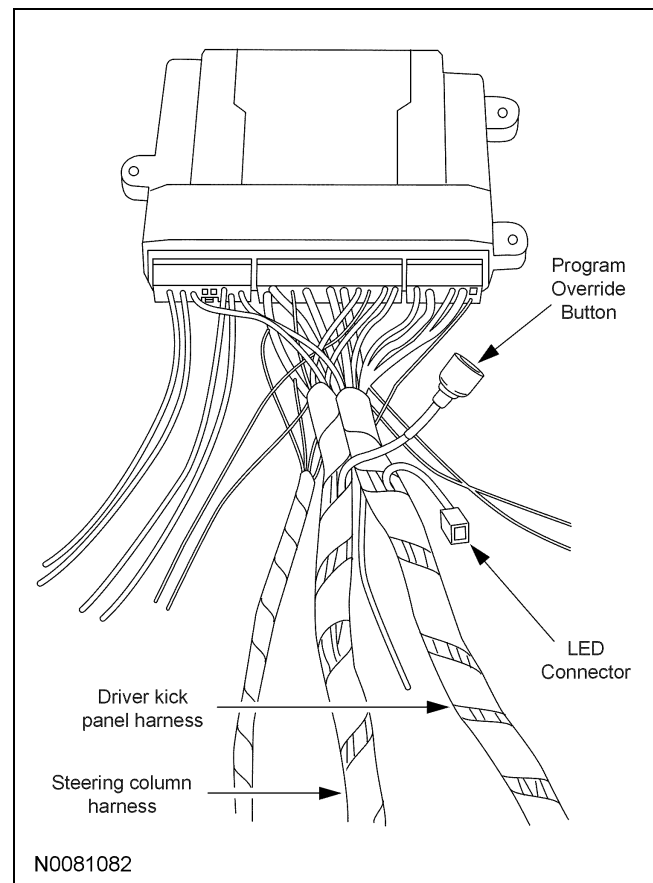
6. **NOTE:** Do not cut the override programming button off of the harness, it is used for all installations.

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

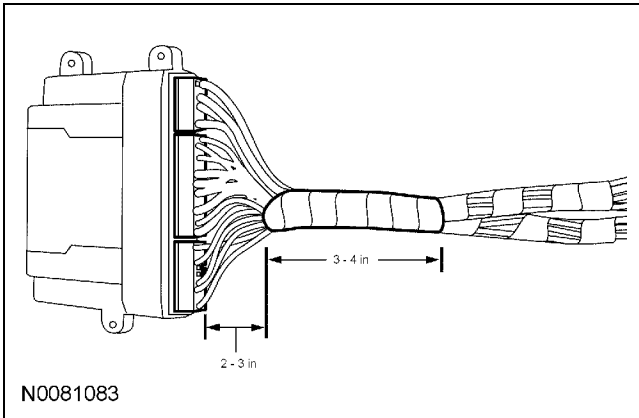
Splice the following wires to the A-4 Red wire in the A connector of the control module approximately 8 inches from the connector

- B-2 Red wire in the B connector.

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



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

INSTALLATION (Continued)**Vehicle Preparation**

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

Dipole Antenna Mounting

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

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

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

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

Install The Dipole Antenna

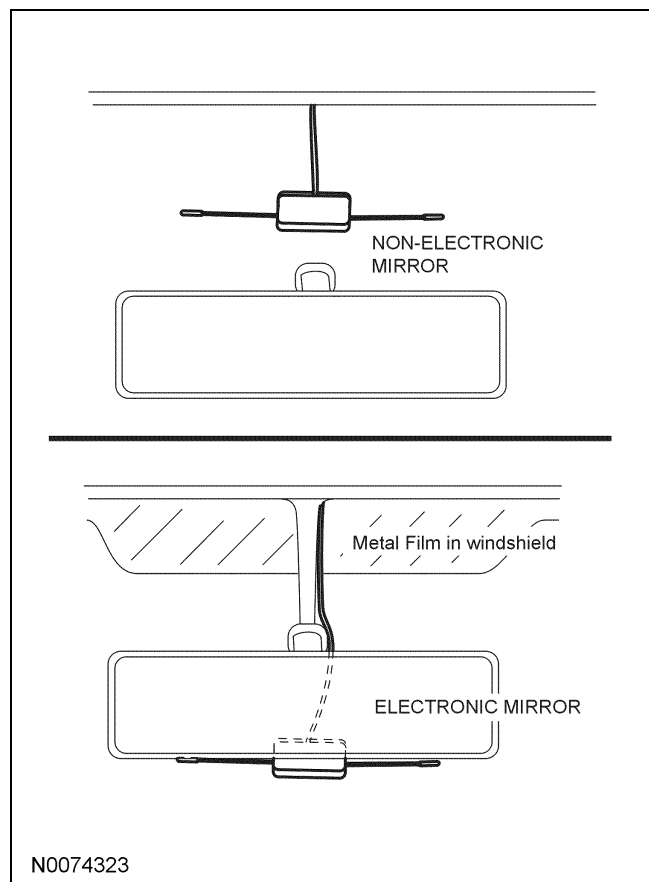
14. Clean the mounting surface using an alcohol base solution and a clean cloth.

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

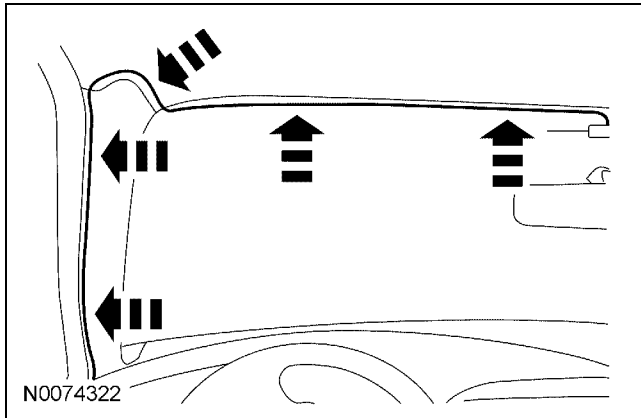
NOTE: Make sure that the long wire on the antenna is pointing toward the top of the windshield since this wire will be routed along the headliner.

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

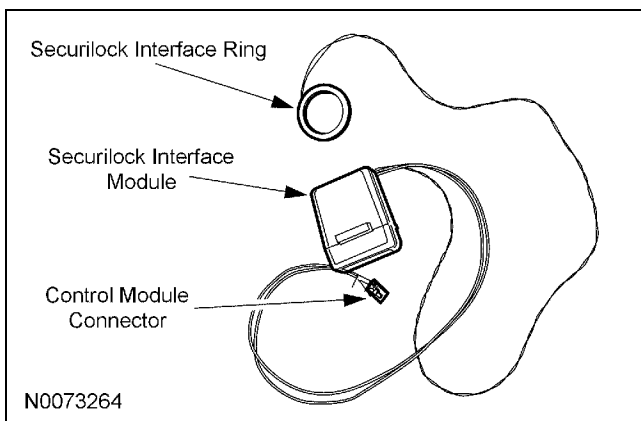
Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the windshield.



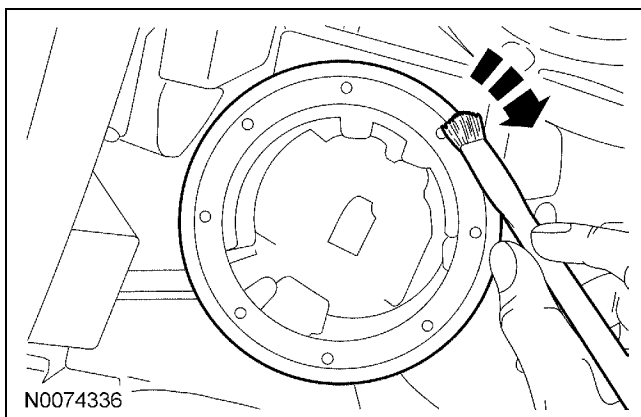
16. Route the dipole antenna cable along the headliner and down the A pillar toward the floor. The wire can be tucked behind the headliner without removing or loosening any of the trim panels.

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

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



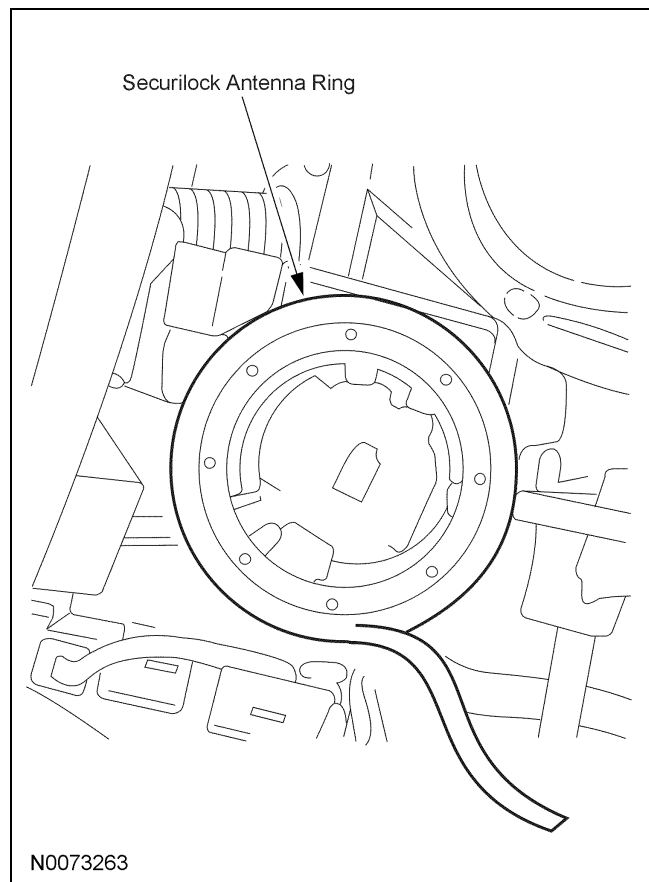
18. Following the directions on the supplied tube of adhesive primer, apply a thin coating around the transceiver antenna coil and allow to dry for approximately 5 minutes.



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

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

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

**Install The Securilock Interface Module**

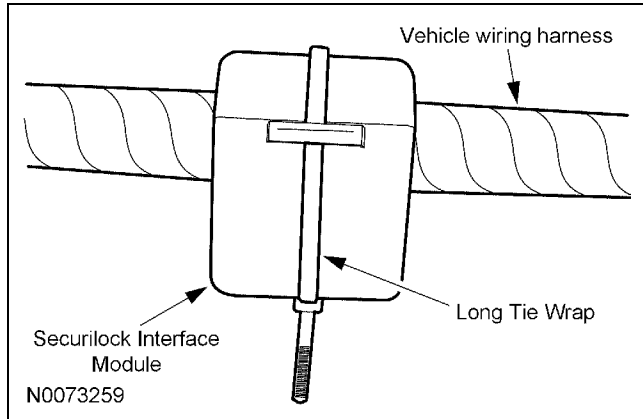
20. **NOTE:** Do Not mount the SECURILOCK Interface Module to or within 3" of a metal surface, including any underdash brackets, or in the knee bolster area.

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

INSTALLATION (Continued)

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

Route the harness and connector to the module mounting location.

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

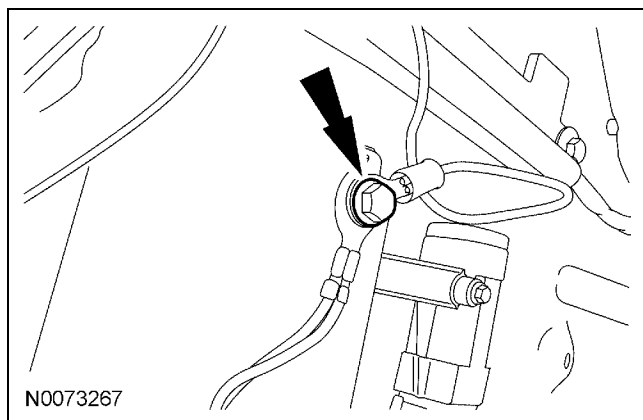
22. Place the RKE/VSS/RMST Control Module and Harness Assembly in the vehicle.

Identify Circuit Wires For Connections

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

INSTALLATION (Continued)

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

INSTALLATION (Continued)

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

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

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

45. Connect the Brown wire from the control module harness to the Blue/Green driver door unlock motor circuit wire at the driver kick panel harness location.

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

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

Identify the Violet/Gray unlock all doors motor circuit wire at the driver side rear sill plate harness location.

47. Connect the Light Green wire from the control module harness to the Violet/Gray unlock all doors motor circuit wire at the driver side rear sill plate harness location.

48. **NOTE:** A DVOM connected to the correct wire will show 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.

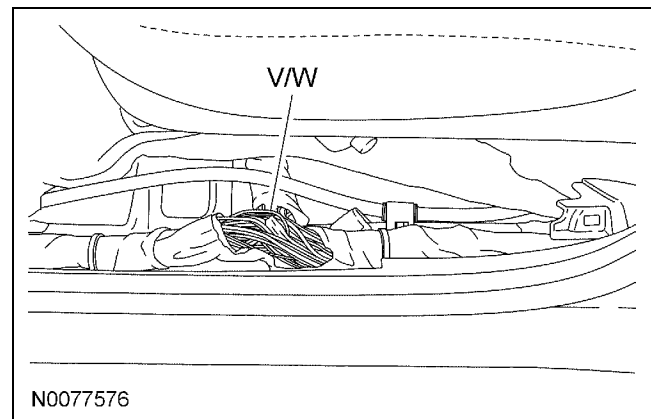
Identify the Brown dome light circuit wire at the dimmer switch.

49. Connect the Black/White wire from the control module harness to the Brown dome light circuit wire at the dimmer switch.

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

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

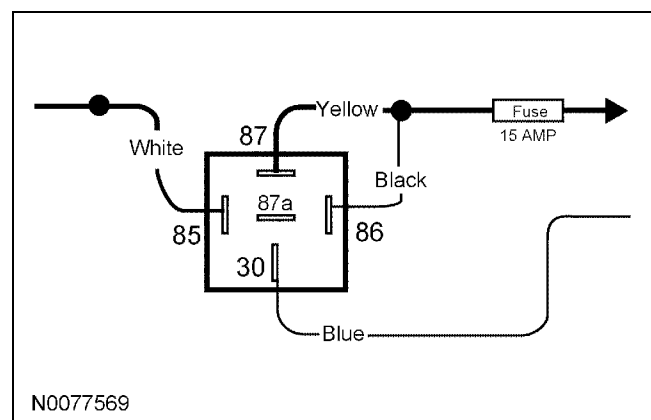
Identify the Violet/White parking lights on circuit wire at the driver front sill plate harness



51. Connect the White wire from the control module harness to the Violet/White parking lights on circuit wire at the driver front sill plate harness location.

Install The Lift Glass Release Relay

52. Prepare the relay harness.
53. Remove the circuit 87a Red wire and terminal from the relay harness connector.
- Release the locking tab and pull the wire and terminal from the connector.



INSTALLATION (Continued)

54. Connect the circuit 87 Yellow wire to the circuit 86 Black wire.
55. Attach a 15 amp in-line fuse holder assembly to the circuit 86 Black wire.
56. **NOTE:** A DVOM connected to the correct wire will show 12V with the key in any position.
A logic probe connected to the correct wire will show power with the key in any position.
This circuit is always hot.
Identify the Blue/Red ignition wire at the ignition switch harness.
57. Connect the circuit 86 Black wire to the Blue/Red ignition wire at the ignition switch harness.
58. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the liftgate release switch is pressed.
A logic probe will show ground on the correct wire, then show power when the liftgate release switch is pressed.
Identify the Brown/Blue lift glass release circuit wire at the rear drivers sill panel harness location.
59. Connect the circuit 30 Blue wire from the door lock relay harness to the Brown/Blue lift glass release circuit wire at the rear drivers sill panel harness location.
60. Connect the circuit 85 White wire from the door lock relay harness to the Blue/Green wire from the control module harness.

Install The Hood Safety Switch

61. **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.

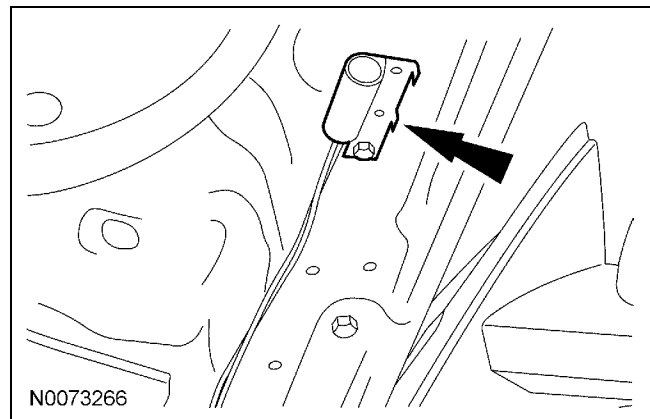
NOTE: The switch should be positioned about 30 degrees below parallel to the ground to accommodate for parking on inclines.

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

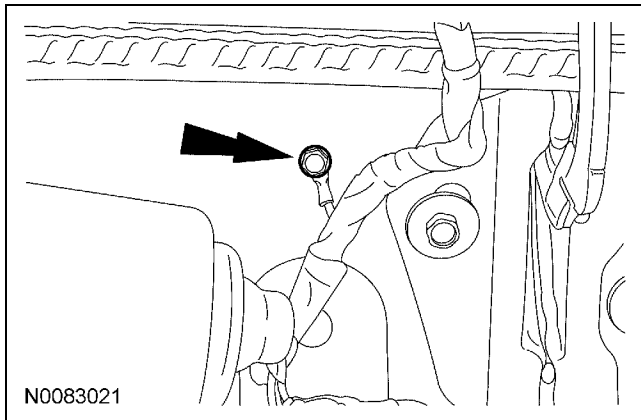
Locate an easy to access area near the driver side hood hinge and install the hood safety switch using the supplied metal screws.

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



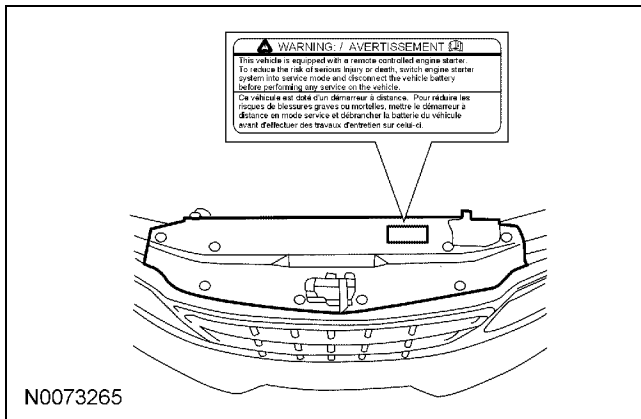
INSTALLATION (Continued)

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



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

Install the underhood warning label



65. Route the Gray hood safety switch wire from the RKE/VSS/RMST control module through the bulkhead into the engine compartment and attach to the hood safety switch.
66. Connect the dipole antenna to the RKE/VSS/RMST control module.
67. Connect the SECURILOCK interface module to the RKE/VSS/RMST control module.

Optional Connections/Features - Driver Door Priority Unlock

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

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

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

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

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

Optional Connections/Features - Headlights

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

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

Identify the Yellow/Blue headlight circuit wire at the headlight switch.

73. Connect the Red/White wire from the control module harness to the Yellow/Blue headlight circuit wire at the headlight switch.

INSTALLATION (Continued)**Power Connection**

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

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

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

75. Connect the one Red wire from the control module harness to the one Blue/Red Battery circuit wire in the ignition switch harness.

Program The RKE/VSS/RMST System

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

Secure RKE/VSS/RMST Harness and Control Module

77. Use the supplied tie wraps to secure the RKE/VSS/RMST harness wires.
-

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

To ensure the best performance of the built-in shock sensor, secure the control module at three points to the vehicle.

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

Install Trim

79. Install the left hand scuff plate and cowl trim panel.
80. Install the upper and lower steering column shrouds.
- Install the 3 screws.
81. Install the steering column opening trim.

GENERAL PROCEDURES

Programming

Programming the Module

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

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

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

NOTE: The remote start override button must be accessible.

Programming Options: Entering Programming Mode

- See chart below for programming information.

Option Bank - 1 Chart (4 - Honks)

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

Option Bank - 2 Chart (5 - Honks)

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

Option Bank - 3 Chart (6 - Honks)

BANK	OPTIONS	DESCR	LED
3	1	DRIVER PRIORITY UNLOCK	NOTE 2

Option Bank - 4 Chart (7 - Honks)

BANK	OPTIONS	DESCR	LED
4	1	TACHLESS MODE	ON

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

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

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

GENERAL PROCEDURES (Continued)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

NOTE: The remote start module is now programmed.

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

Programming the SECURILOCK

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

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


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

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

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

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

GENERAL PROCEDURES (Continued)

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

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

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

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

23. 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

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)

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

MAKE THIS CONNECTION LAST!

RKE/VSS/RMST MODULE WIRE HARNESS

STEERING COLUMN HARNESS

	Color	Function
A-4	RED	Battery
B-2	RED	HVAC1 Battery Feed
A-7	PINK	Ignition 1 Input/Output
B-4	ORANGE	HVAC1 Output
B-8	BLACK/WHITE	Key-in-sense Input
A-8	VIOLET	Starter Interrupt Motor Side
A-21	BROWN/BLACK	Horn Relay Output
B-7	BROWN	Brake Input

UNDERHOOD HARNESS

	Color	Function
A-19	GRAY	Hood Open Switch Input

Vehicle Interior

Underhood

Chassis ground

Do Not Ground to Hood!

HOOD TILT SWITCH

Battery (BLUE/RED) +

Ignition (WHITE/ORANGE) +

Heater (VIOLET/GREEN) +

Key-in-Sense (BLUE/GRAY) +

Starter (BLUE/WHITE) +

Horn (BROWN) =

SJB Brake Output (GRAY/BROWN) +

IGNITION SWITCH HARNESS

STEERING COLUMN HARNESS

DRIVERS KICK PANEL

RKE/VSS/RMST MODULE WIRE HARNESS

DRIVER'S SIDE KICK PANEL HARNESS

	Color	Function
A-5	BLACK	Ground

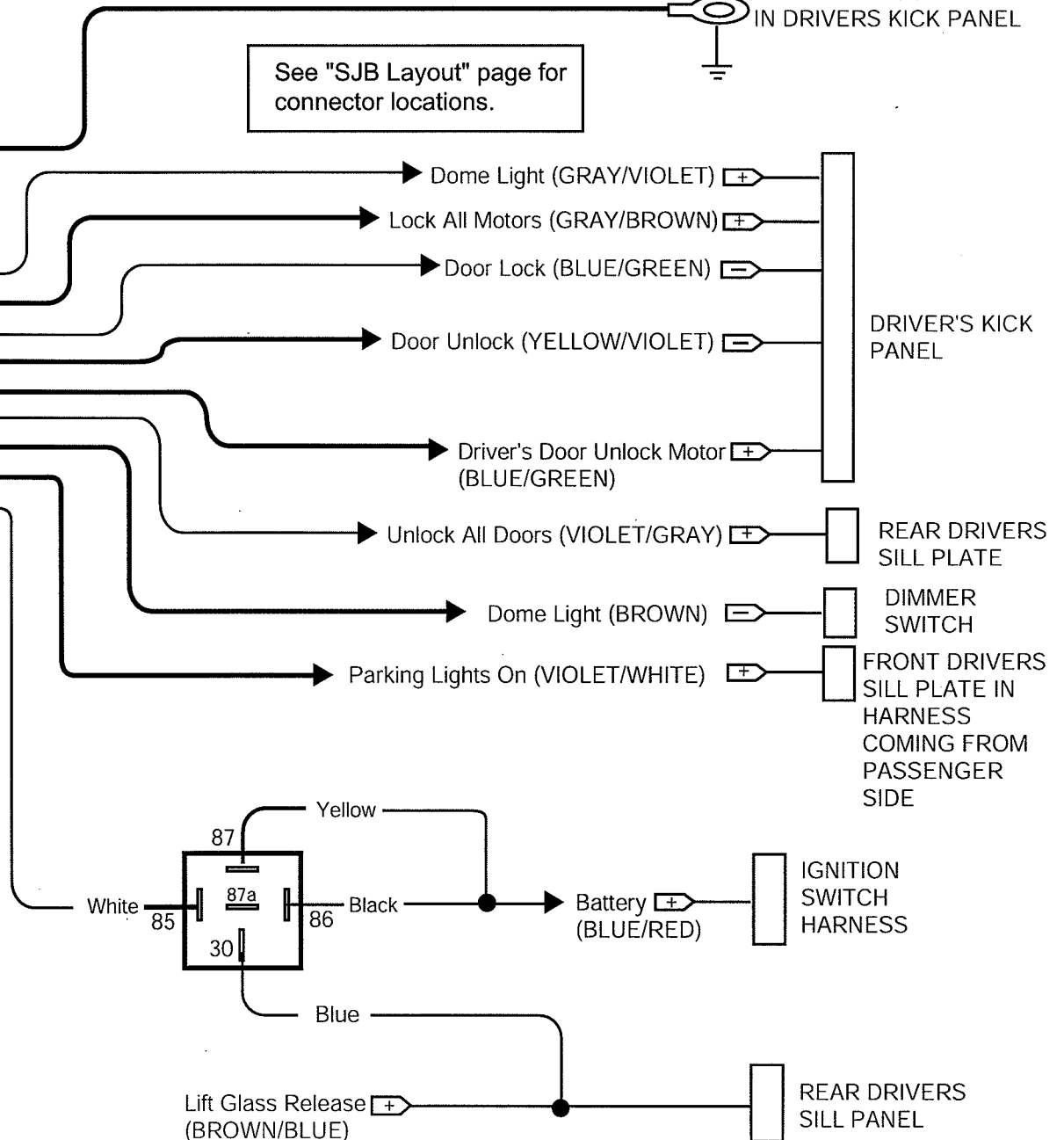
KICK PANEL HARNESS

	Color	Function
A-20	GREEN/VIOLET	Door Ajar Switch Input
A-11	WHITE/BLUE	Arm Input
A-2	BLUE	Door Lock Output
A-14	GREEN	Door Unlock Output
A-9	BROWN	Disarm Input
A-12	LT. GREEN	Unlock Switch Sense Input
A-3	BLACK/WHITE	Dome Light OutputA-24
A-1	WHITE	Parking Light Output
A-24	BLUE/GREEN	Driver Door Unlock Output

MAKE THIS CONNECTION FIRST!

CHASSIS GROUND STUD
IN DRIVERS KICK PANEL

See "SJB Layout" page for
connector locations.



OPTIONAL CONNECTIONS / FEATURES

OPTION PROGRAMMING REQUIREMENTS

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

RKE/VSS/RMST MODULE WIRE HARNESS

DRIVER'S DOOR PRIORITY UNLOCK

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

To Driver Door Unlock Motor
(BLUE/GREEN) 


CUT 

DRIVERS
KICK PANEL

Connect to the half of the
wire going to the back
towards the SJB.

HEADLIGHTS/REAR DEFROSTER

	Color	Function
C-10	RED/WHITE	Headlight Output

Headlights (YELLOW/BLUE)  HEADLIGHT
SWITCH

RKE/VSS/REMOTE START SYSTEM INSTALLATION

CONTENTS

INSTALLATION

[RKE/VSS/Remote Start](#)

GENERAL PROCEDURES

[Proper Splicing Techniques](#)

[Programming](#)

[Functional Test](#)

[Shock Sensor Setting](#)

[Troubleshooting](#)

WIRING DIAGRAMS

[Vehicle Specific Wiring Diagrams](#)

INSTALLATION

Remote Start

Expedition/Navigator

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

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

1. Verify correct kit number.

Review RKE/VSS/RMST Installation Kit Contents

NOTE: Use kit number 7L3Z-19G364-AA REMOTE START SYSTEM

NOTE: Kits are vehicle specific and are not interchangeable.

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

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

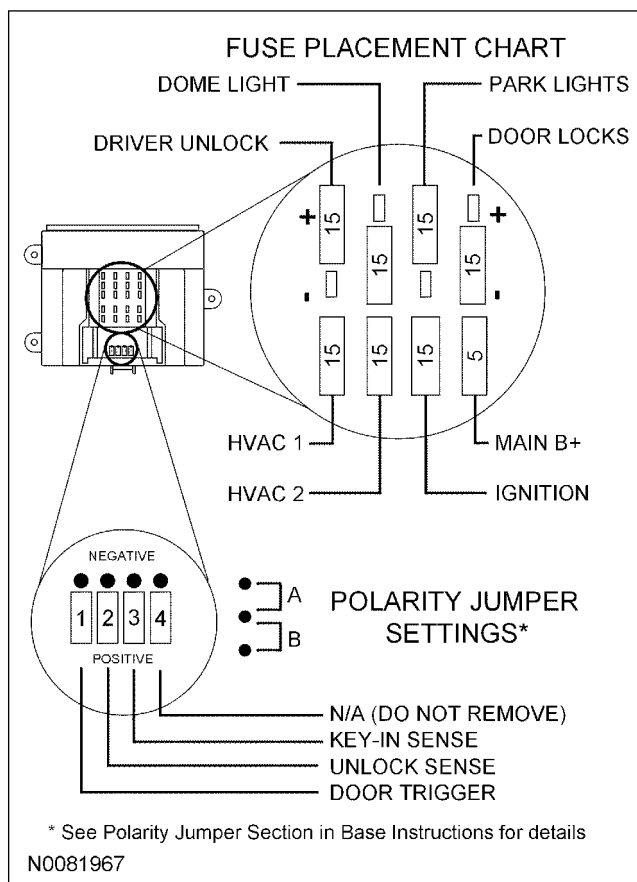
QUANTITY	DESCRIPTION
1	MODULE ASSEMBLY
1	RKE/VSS/RMST SOFTWARE CARTRIDGE ASSEMBLY
2	6 BUTTON POWERCODE TRANSMITTER
3	WIRING HARNESS ASSEMBLIES
1	DIPOLE ANTENNA
1	HOOD SAFETY SWITCH ASSEMBLY
1	INSTALLATION PARTS BAG
1	FUSE PARTS BAG
1	OPERATORS INSTRUCTIONS

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

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

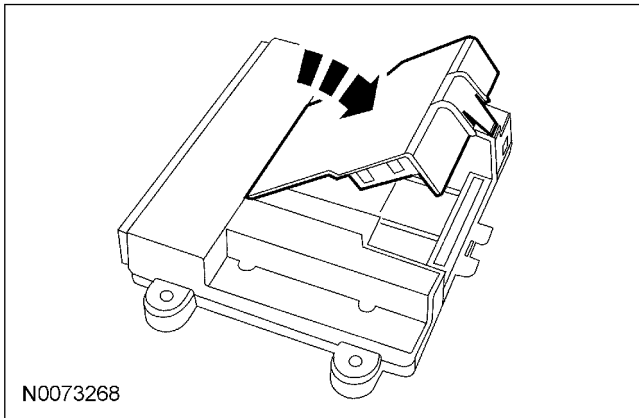
Module Preparation

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

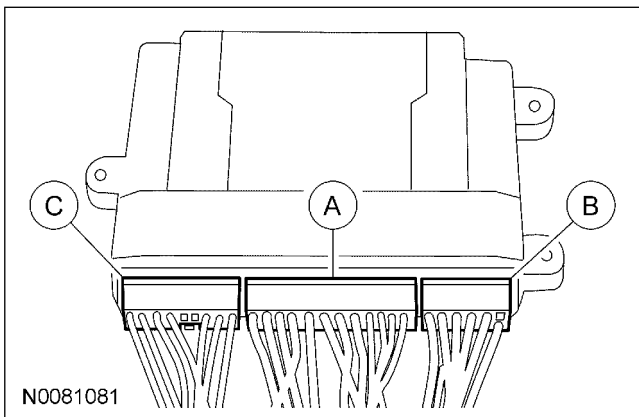


INSTALLATION (Continued)

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



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



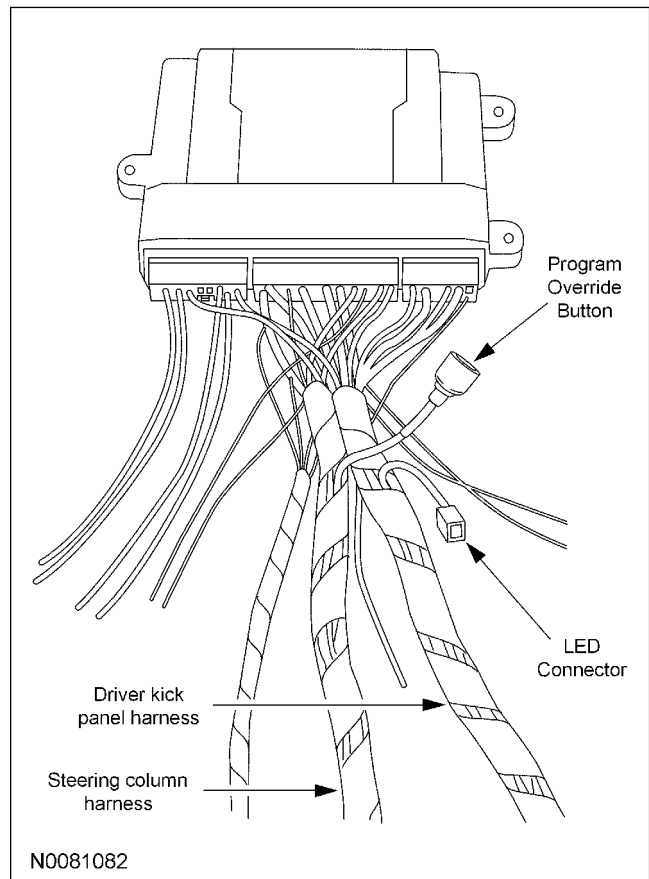
6. **NOTE:** Do not cut the override programming button off of the harness, it is used for all installations.

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

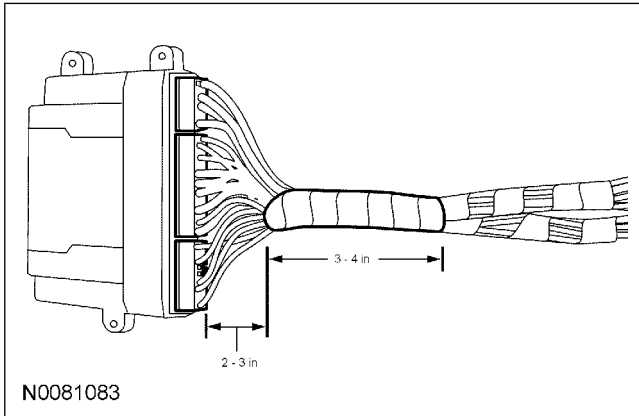
Splice the following wires to the B-2 Red wire in the A connector of the control module approximately 8 inches from the connector

- B-1 Blue wire in the B connector.

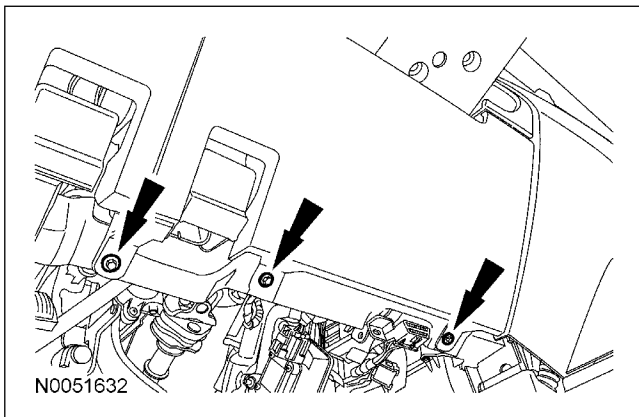
7. Referring to the vehicle specific wiring section for the system being installed, gather all individual wires that will be routed to the same areas of the vehicle into groups. Cover each wire group with electrical tape for approximately 18". Depending on the vehicle, there will be 2 to 5 different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



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

INSTALLATION (Continued)**Vehicle Preparation - All Vehicles**

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

**Vehicles With Power Tilt**

10. Remove the 3 screws and the upper and lower steering column shrouds.
 - Disconnect the power tilt electrical connector switch from the lower shroud.

Vehicles With Manual Tilt

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

All Vehicles

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

Dipole Antenna Mounting

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

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

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

Install The Dipole Antenna

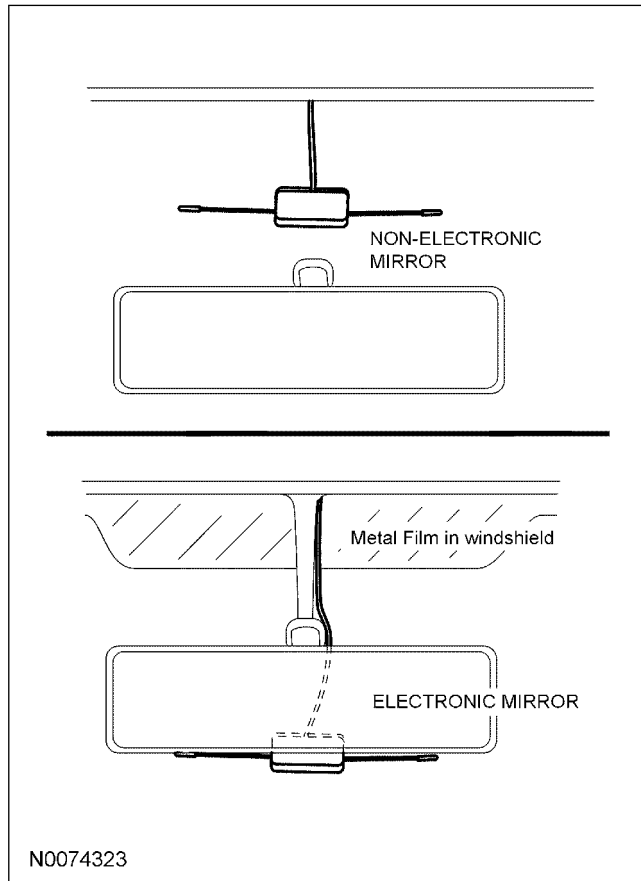
15. Clean the mounting surface using an alcohol base solution and a clean cloth.

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

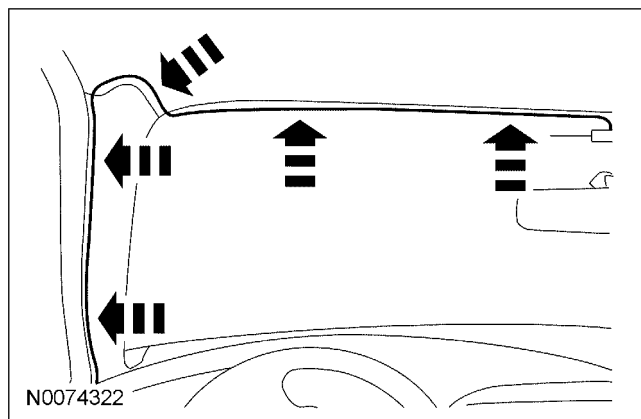
NOTE: Make sure that the long wire on the antenna is pointing toward the top of the windshield since this wire will be routed along the headliner.

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

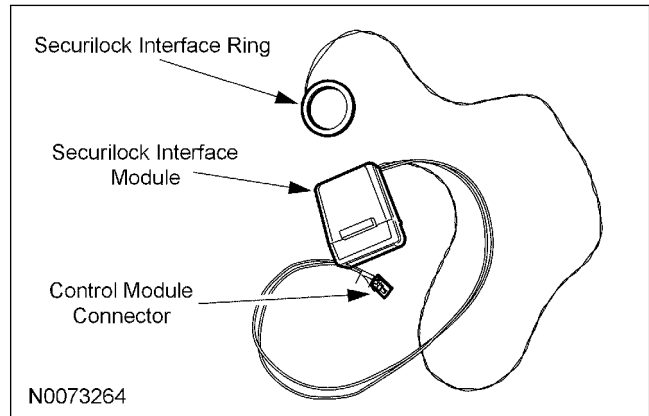
Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the windshield.

INSTALLATION (Continued)

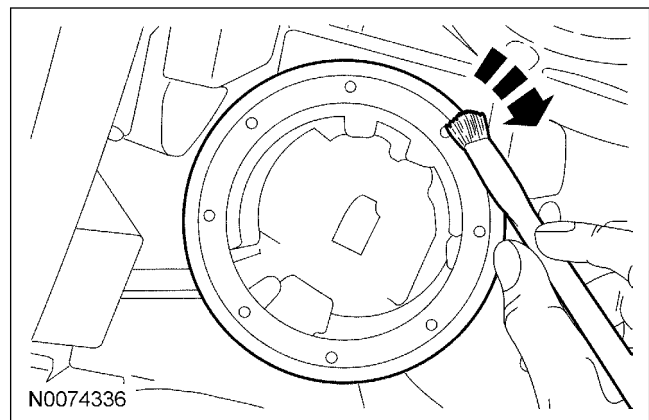
17. Route the dipole antenna cable along the headliner and down the A pillar toward the floor. The wire can be tucked behind the headliner without removing or loosening any of the trim panels.

**Install The Securilock Interface Kit**

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



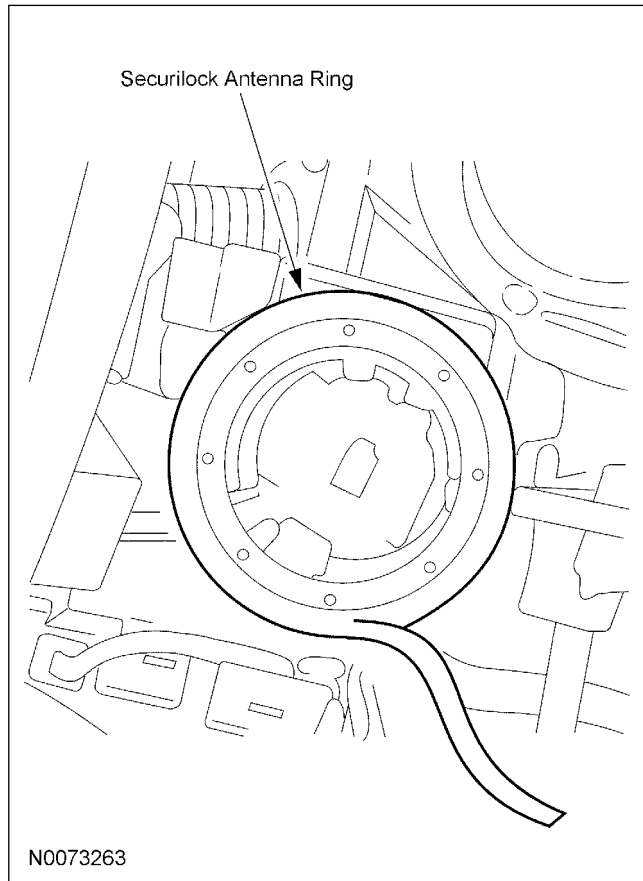
19. Following the directions on the supplied tube of adhesive primer, apply a thin coating around the transceiver antenna coil and allow to dry for approximately 5 minutes.



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

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

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

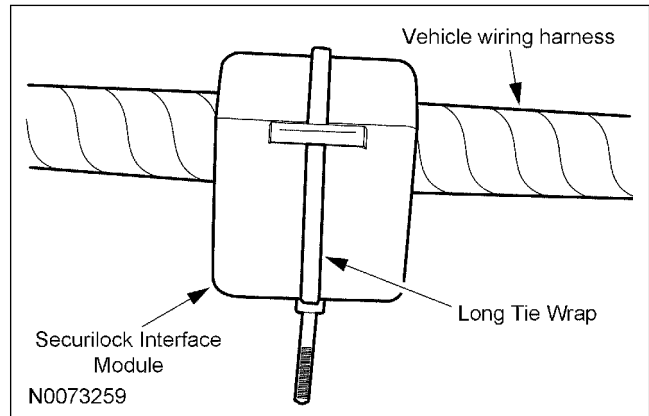
INSTALLATION (Continued)**Install The Securilock Interface Module**

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

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

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

Route the harness and connector to the module mounting location.

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

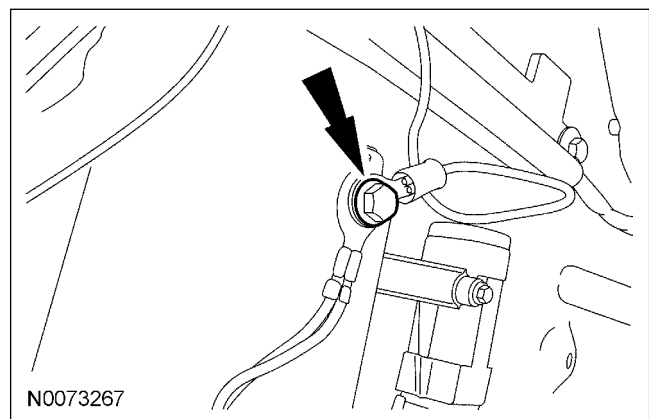
23. Place the RKE/VSS/RMST control module and harness assembly in the vehicle.

Identify Circuit Wires For Connections

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

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

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



INSTALLATION (Continued)

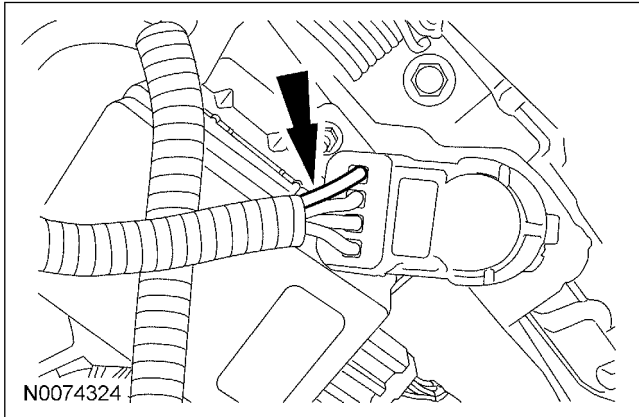
25. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the ignition switch is in the RUN/START position.
- A logic probe will show ground on the correct wire, then show power when the ignition switch is in the RUN/START position.
- Identify the White/Orange ignition circuit wire at the ignition switch harness.
26. Connect the Pink wire from the control module harness to the White/Orange ignition circuit wire at the ignition switch harness.
27. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the ignition switch is in the RUN/ACC position.
- A logic probe will show ground on the correct wire, then show power when the ignition switch is in the RUN/ACC position.
- Identify the Violet/Green Run/Acc circuit wire at the ignition switch harness.
28. Connect the Orange wire from the control module harness to the Violet/Green Run/Acc circuit wire at the ignition switch harness.
29. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the ignition switch is in the RUN position.
- A logic probe will show ground on the correct wire, then show power when the ignition switch is in the RUN position.
- Identify the Brown/Yellow Run 2 circuit wire at the ignition switch harness.
30. Connect the Orange/White wire from the control module harness to the Brown/Yellow Run 2 circuit wire at the ignition switch harness.
31. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the ignition is in the START position.
- A logic probe will show ground on the correct wire, then show power when the ignition is in the START position.
- Identify the Blue/White starter circuit wire at the ignition switch harness.
32. Connect the Violet wire from the control module harness to the Blue/White starter circuit wire at the ignition switch harness.
33. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the key is in the ignition lock cylinder.
- A logic probe will show ground on the correct wire, then show power when the key is in the ignition lock cylinder.
- Identify the Blue/Grey key-in-sense circuit wire at the ignition switch harness.
34. Connect the Black/White wire from the control module harness to the Blue/Grey key-in-sense circuit wire at the ignition switch harness.
35. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the horn button is held.
- A logic probe will show power on the correct wire, then show ground when the horn button is held.
- Identify the Yellow/Red horn circuit wire in the steering column harness.
36. Connect the Brown/Black wire from the remote start module harness to the Yellow/Red horn circuit wire in the steering column harness.
37. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the dome light switch is ON.
- A logic probe will show power on the correct wire, then show ground when the dome light switch is ON.
- Identify the Green/Blue dome light circuit wire at the dimmer switch.
38. Connect the Black/White wire from the control module harness to the Green/Blue dome light circuit wire at the dimmer switch.

INSTALLATION (Continued)

39. **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 Yellow/Gray brake switch circuit wire at the brake switch.



40. Connect the Brown wire from the remote start module harness to the Yellow/Gray brake switch circuit wire at the brake switch.
41. **NOTE:** A DVOM connected to the correct wire will show 12V with the vehicle door(s) open and the dome light on, then show 0V with the vehicle door(s) closed and the dome light off.
- NOTE:** A logic probe connected to the correct wire will show power with the vehicle door(s) open and the dome light on, then show ground with the vehicle door(s) closed and the dome light off.
- NOTE:** Be sure that the dome light has timed out and is off before performing the door closed test.
- Be sure that the dome lamp is illuminated before performing the door open test.
- Identify the Gray/Violet dome light circuit wire at the driver kick panel.
42. Connect the Green/Violet wire from the control module harness to the Gray/Violet dome light circuit wire at the driver kick panel.

43. **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 White/Brown power door lock circuit wire at the driver kick panel harness.

44. Connect the Blue wire from the remote start module harness to the White/Brown power door lock circuit at the driver kick panel harness.

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

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

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

46. Connect the Green wire from the remote start module harness to the Blue/Brown power door unlock circuit at the driver kick panel harness.

47. **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 Gray/Brown lock all motors circuit wire at the driver kick panel.

48. Connect the White/Blue wire from the control module harness to the Gray/Brown lock all motors circuit wire at the driver kick panel.

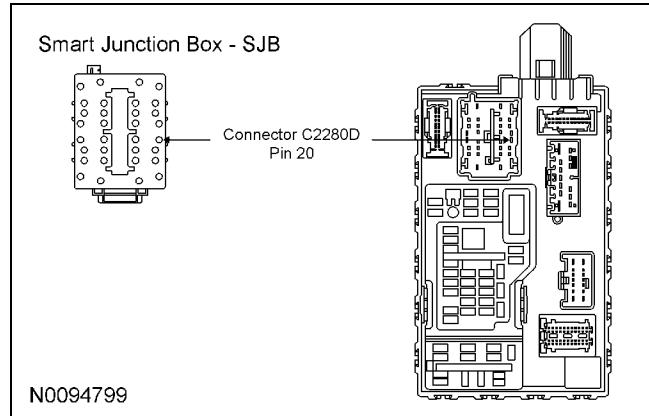
49. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the door unlock switch is pressed.

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

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

INSTALLATION (Continued)

50. Connect the Brown wire from the control module harness to the Blue/Green driver door unlock circuit wire at the driver kick panel harness.
51. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the door unlock switch is pressed.
A logic probe will show ground on the correct wire, then show power when the door unlock switch is pressed.
Identify the Violet/Gray unlock switch sense circuit wire at the rear of driver door sill plate harness.
52. Connect the Light Green wire from the control module harness to the Violet/Gray unlock switch sense circuit wire at the rear of driver door sill plate harness.
53. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the lift glass release switch is pressed.
A logic probe will show power on the correct wire, then show ground when the lift glass release switch is pressed.
Identify the Brown/Yellow lift glass release circuit wire at the rear of driver door sill plate harness.
54. Connect the Blue/Green wire from the relay harness to the Brown/Yellow lift glass release circuit wire at the rear of driver door sill plate harness.
55. **NOTE:** A DVOM connected to the correct wire will show 12V, when the Headlight Switch is in the park lamp position, then show 0V when the Headlight Switch is OFF.
A logic probe will show power on the correct wire when the Headlight Switch is in the park lamp position, then show ground when the Headlight Switch is OFF.
Identify the Violet/White parking light circuit wire at the Smart Junction Box SJB Connector C2280D Pin 20.



56. Connect the White wire from the control module harness to the Violet/White parking light circuit wire at the SJB Connector C2280D Pin 20.

Optional Connections/Features - Driver Door Priority Unlock

57. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V while depressing the door unlock switch.
A logic probe will show ground on the correct wire, then show power while depressing the door unlock switch.
Identify the Blue/Green door unlock circuit wire at the driver kick panel.
58. Cut the Blue/Green door unlock circuit wire at the driver kick panel.
59. Connect the following wires to the side of the Blue/Green door unlock circuit wire going to the back towards the SJB.
- Tan/Red wire from the control module harness.
 - With Factory RKE only, Brown wire from the control module harness.
60. Connect the Tan wire from the control module harness to the remaining side of the cut Blue/Green door unlock circuit wire.

INSTALLATION (Continued)**Optional Connections/Features - Memory Seats**

61. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the memory seat function is activated.

A logic probe will show power on the correct wire, then show ground when the memory seat function is activated.

Identify the Violet/White memory seat 1 circuit wire at the center console harness.

62. Connect the Green/White wire from the control module harness to the Violet/White memory seat 1 circuit wire at the center console harness.
63. Identify the Yellow memory seat 2 circuit wire at the center console harness.
64. Connect the Yellow/Green wire from the control module harness to the Yellow memory seat 2 circuit wire at the center console harness.

Optional Connections/Features - Power Lift Gate

65. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the power lift gate function is activated.

A logic probe will show open on the correct wire, then show ground when the power lift gate function is activated.

Identify the Gray/Yellow power lift gate circuit at the instrument panel switch.

66. Connect the Black/Green wire from the control module harness to the Gray/Yellow power lift gate circuit at the instrument panel switch.

Optional Connections/Features - Rear Defrost

67. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the rear defroster switch is activated.

A logic probe will show power on the correct wire, then show ground when the rear defroster switch is activated

Identify the White/Orange rear defroster circuit wire at the Heating Ventilation Air Conditioning (HVAC) module.

68. Connect the Blue/White wire from the control module harness to the White/Orange rear defroster circuit wire at the Heating Ventilation Air Conditioning (HVAC) module.

Optional Connections/Features - Headlight Illumination

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

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

Identify the Green/Brown Flash-To-Pass circuit wire at the Multifunction Switch.

70. Connect the Red/White wire from the control module harness to the Green/Brown Flash-To-Pass circuit wire at the Multifunction Switch.

Install The Hood Safety Switch

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

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

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

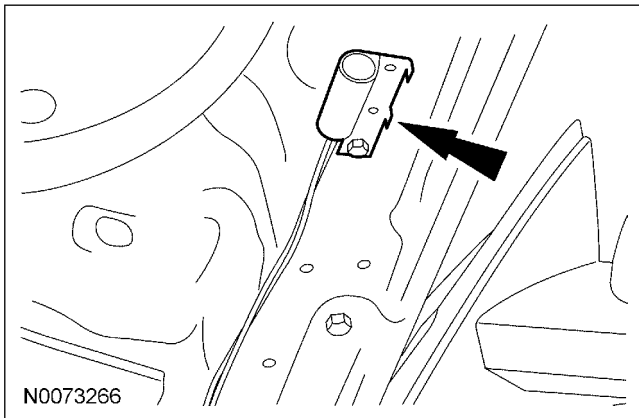
Failure to position the switch properly could result in one of the following:

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

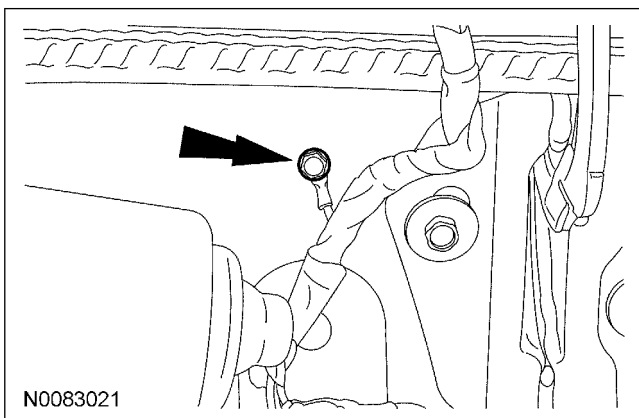
Locate an easy to access area near the driver side hood hinge and install the hood safety switch using the supplied metal screws.

INSTALLATION (Continued)

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

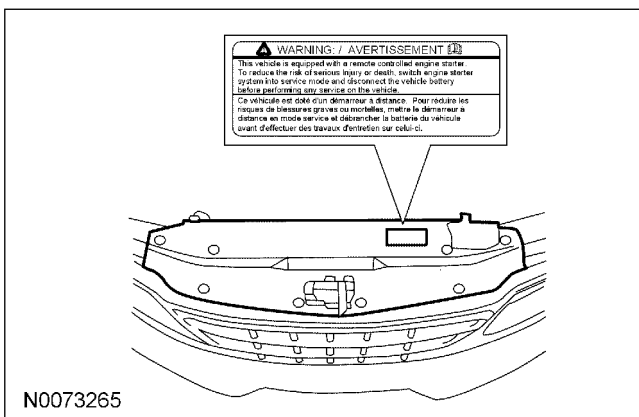


73. Connect hood switch ground wire to a suitable location on the bulkhead.



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

Install the underhood warning label



75. Route the Gray hood safety switch wire from the RKE/VSS/RMST control module through the bulkhead into the engine compartment and attach to the hood safety switch.

76. Connect the dipole antenna to the RKE/VSS/RMST control module.

77. Connect the SECURILOCK interface module to the RKE/VSS/RMST control module.

Power Connection

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

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

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

79. Connect the one Red wire from the control module harness to the one Blue/Red Battery circuit wire in the ignition switch harness.

80. Connect the remaining Red wire from the control module harness to the remaining Blue/Red Battery circuit wire in the ignition switch harness.

Program The RKE/VSS/RMST System

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

Secure RKE/VSS/RMST Harness and Control Module

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

83. **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.

INSTALLATION (Continued)**All Vehicles**

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

Vehicles With Manual Tilt

85. Install the upper and lower steering column shrouds.
Install the 3 screws.

Vehicles With Power Tilt

86. Connect the power tilt electrical connector switch on the lower shroud.
-

87. Install the upper and lower steering column shrouds.

Install the 3 screws.

All Vehicles

88. Install the lower steering column opening cover.
Install the 3 screws.

GENERAL PROCEDURES

Programming

Programming the Module

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

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

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

NOTE: The remote start override button must be accessible.

Programming Options: Entering Programming Mode

- See chart below for programming information.

Option Bank - 1 Chart (4 - Honks)

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

Option Bank - 2 Chart (5 - Honks)

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

Option Bank - 3 Chart (6 - Honks)

BANK	OPTIONS	DESCR	LED
3	1	DRIVER PRIORITY UNLOCK	NOTE 2

Option Bank - 4 Chart (7 - Honks)

BANK	OPTIONS	DESCR	LED
4	1	TACHLESS MODE	ON

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

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

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

GENERAL PROCEDURES (Continued)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

NOTE: The remote start module is now programmed.

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

Programming the SECURILOCK

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

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

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

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

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

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

GENERAL PROCEDURES (Continued)

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



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

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

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

23. 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

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.

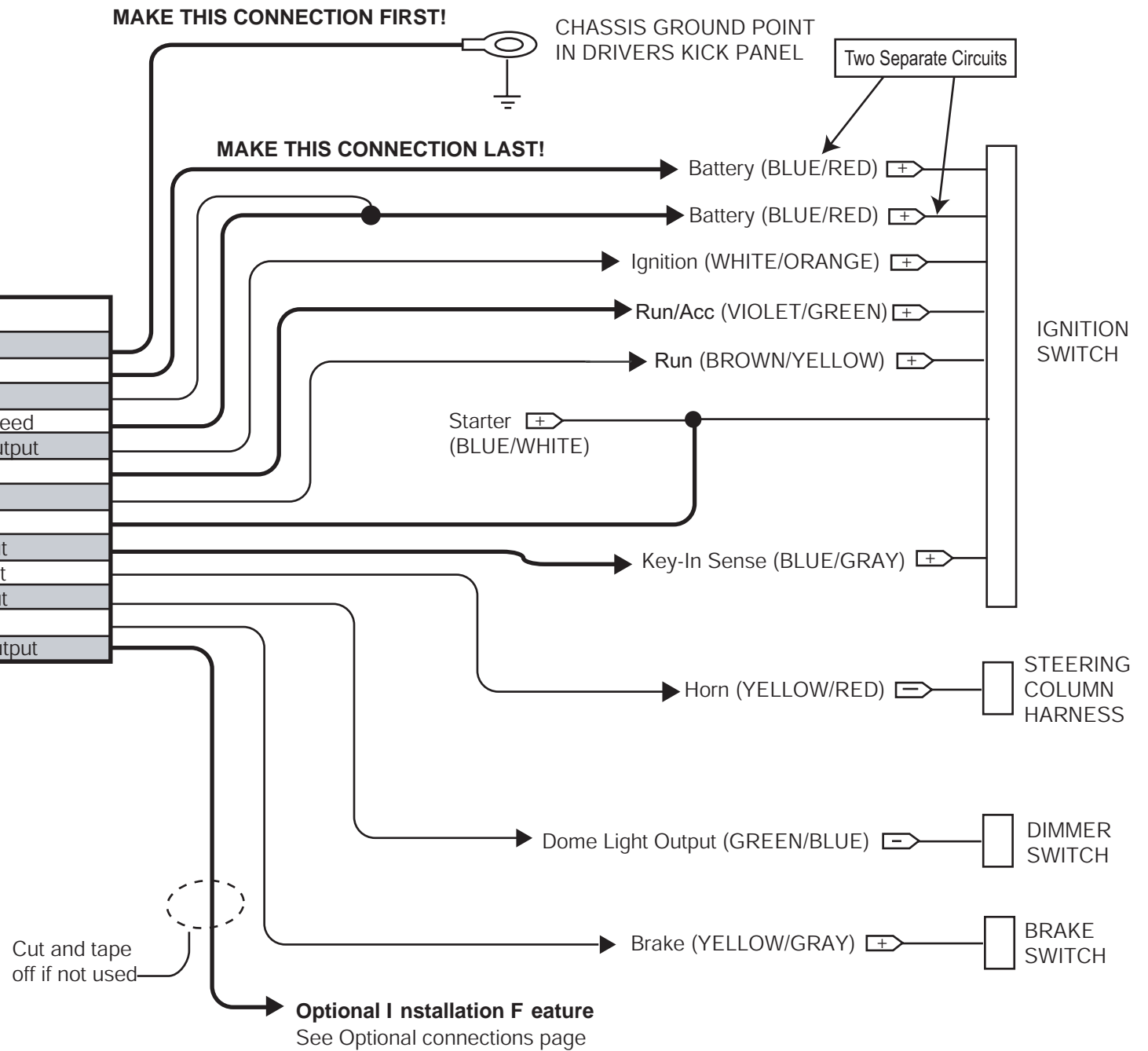
GENERAL PROCEDURES (Continued)

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

'08 Expedition / Navigator

STEERING COLUMN HARNESS

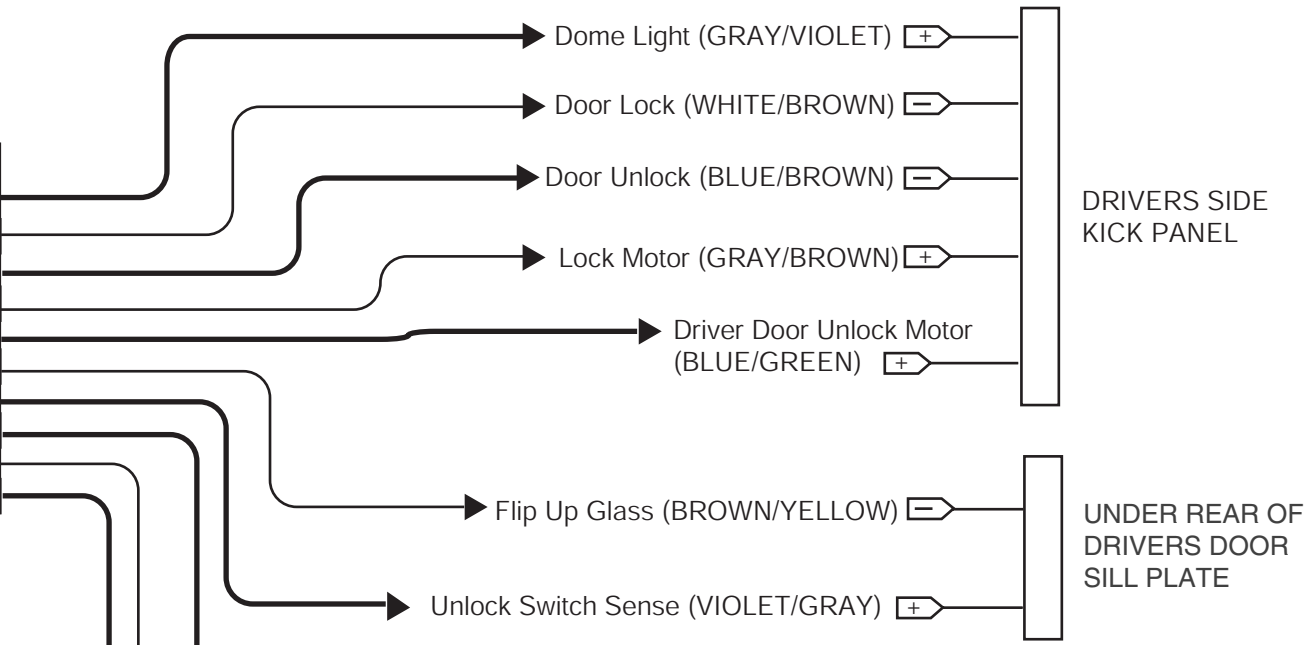
	Color	Function
A-5	BLACK	Ground
A-4	RED	Battery
B-1	BLUE	HVAC2 Feed
B-2	RED	HVAC 1 Battery Feed
A-7	PINK	Ignition 1 Input/Output
B-4	ORANGE	HVAC 1 Output
B-5	ORANGE/WHITE	HVAC 2 Output
A-8	VIOLET	Starter Output
B-8	BLACK/WHITE	Key-in-sense Input
A-21	BROWN/BLACK	Horn Relay Output
A-3	BLACK/WHITE	Dome Light Output
B-7	BROWN	Brake Input
C-11	BLUE/WHITE	Rear Defroster Output



'08 Expedition / Navigator

DRIVERS SIDE KICK PANEL HARNESS

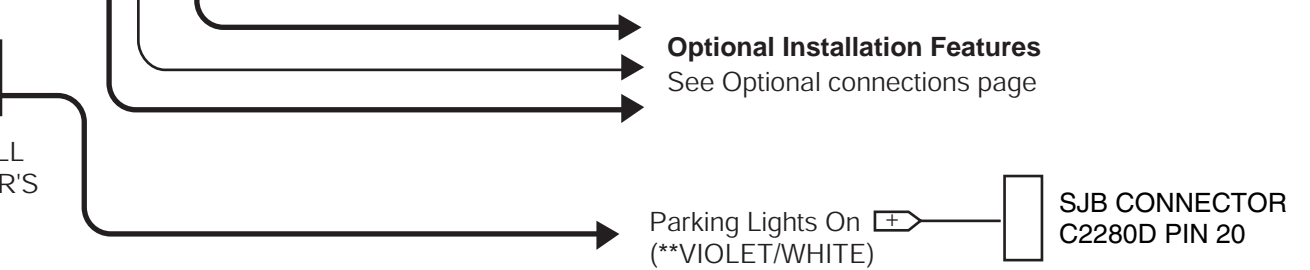
	Color	Function
A-20	GREEN/VIOLET	Door Ajar Switch Input
A-2	BLUE	Door Lock Output
A-14	GREEN	Door Unlock Output
A-11	WHITE/BLUE	Arm Input
A-9	BROWN	Disarm Input
A-24	BLUE/GREEN	Hatch Release Output
A-12	LT GREEN	Unlock Switch Sense
C-12	GREEN/WHITE	Memory Seat 1 Output
C-13	YELLOW/GREEN	Memory Seat 2 Output
C-2	BLACK/GREEN	Motorized Rear Gate Output



PARKING LIGHT HARNESS

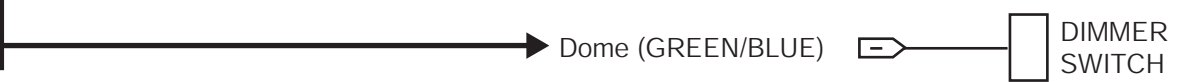
	Color	Function
A-1	WHITE	Parking Light Output

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



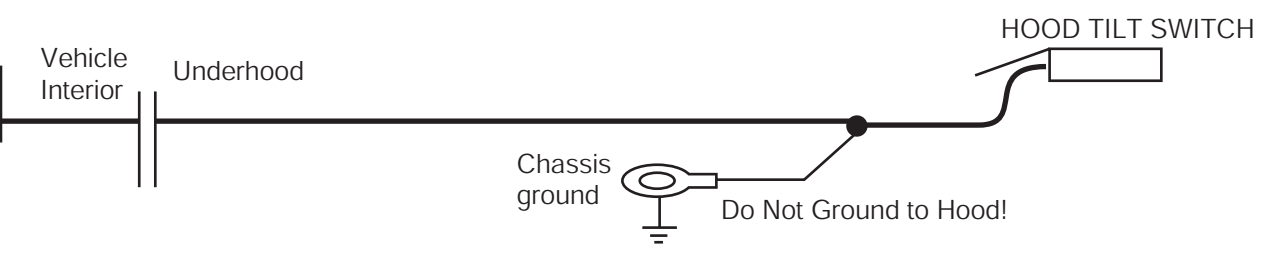
DOMELIGHT HARNESS

	Color	Function
A-3	BLACK/WHITE	Dome Light Output



UNDERHOOD HARNESS

	Color	Function
A-19	GRAY	Hood Open Switch Input



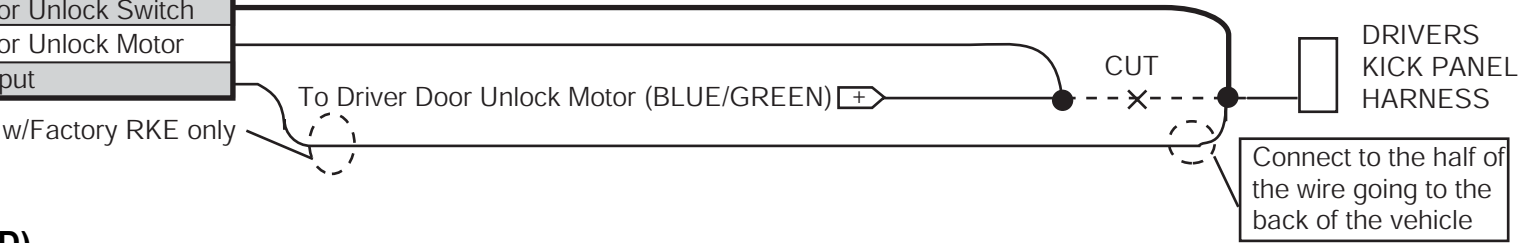
OPTIONAL CONNECTIONS / FEATURES

OPTION PROGRAMMING REQUIREMENTS

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

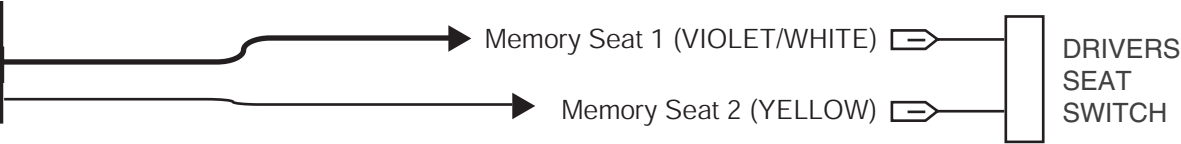
DRIVER'S DOOR PRIORITY UNLOCK

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



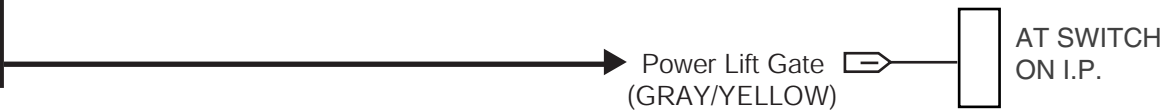
MEMORY SEATS (IF EQUIPPED)

	Color	Function
C-12	GREEN/WHITE	Memory Seat 1
C-13	YELLOW/GREEN	Memory Seat 2



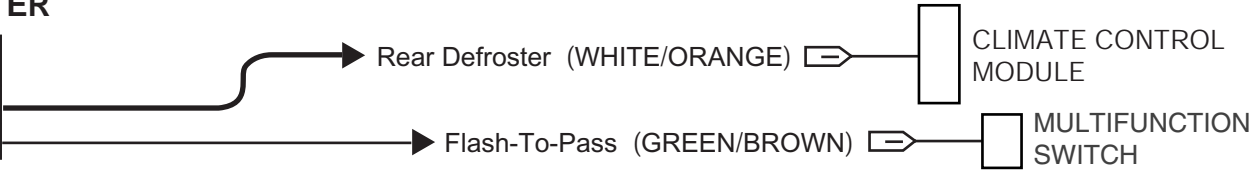
POWER LIFTGATE

	Color	Function
C-2	BLACK/GREEN	Motorized Rear Gate



HEADLIGHT ILLUMINATION / REAR DEFROSTER

	Color	Function
C-11	BLUE/WHITE	Rear Defroster Output
C-10	RED/WHITE	Headlight Output



[Manual Table of Contents](#)

RKE/VSS/REMOTE START SYSTEM INSTALLATION

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WIRING DIAGRAMS

[Vehicle Specific Wiring Diagrams](#)

INSTALLATION

Remote Start

Explorer/Mountaineer/Sport Trac

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

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

1. Verify correct kit number.

Review RKE/VSS/RMST Installation Kit Contents

NOTE: Use kit number 7L3Z-19G364-AA REMOTE START SYSTEM

NOTE: Kits are vehicle specific and are not interchangeable.

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

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

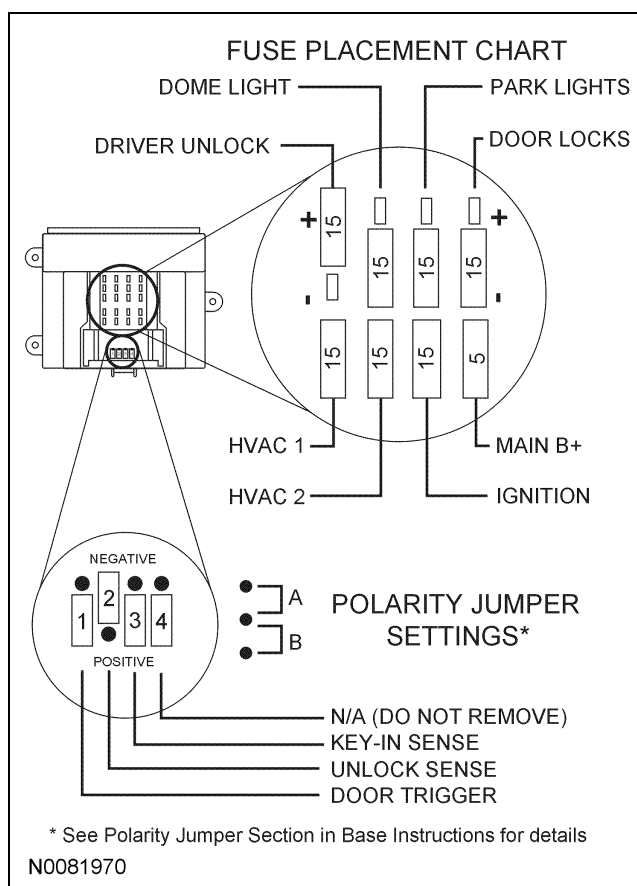
QUANTITY	DESCRIPTION
1	CONTROL MODULE ASSEMBLY
1	SOFTWARE CARTRIDGE ASSEMBLY
2	6 BUTTON POWERCODE TRANSMITTER
3	WIRING HARNESS ASSEMBLIES
1	DIPOLE ANTENNA
1	HOOD SAFETY SWITCH ASSEMBLY
1	INSTALLATION PARTS BAG
1	FUSE PARTS BAG
1	OPERATORS INSTRUCTIONS

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

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

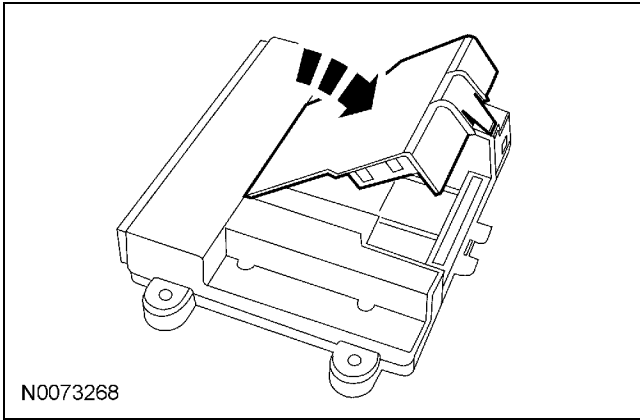
Module Preparation

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

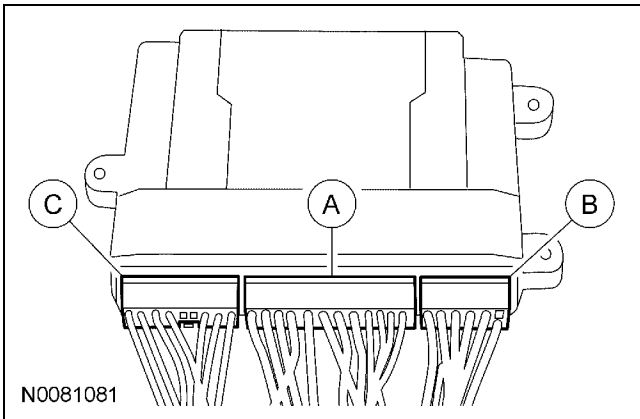


INSTALLATION (Continued)

4. Place the software cartridge onto the control module.



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

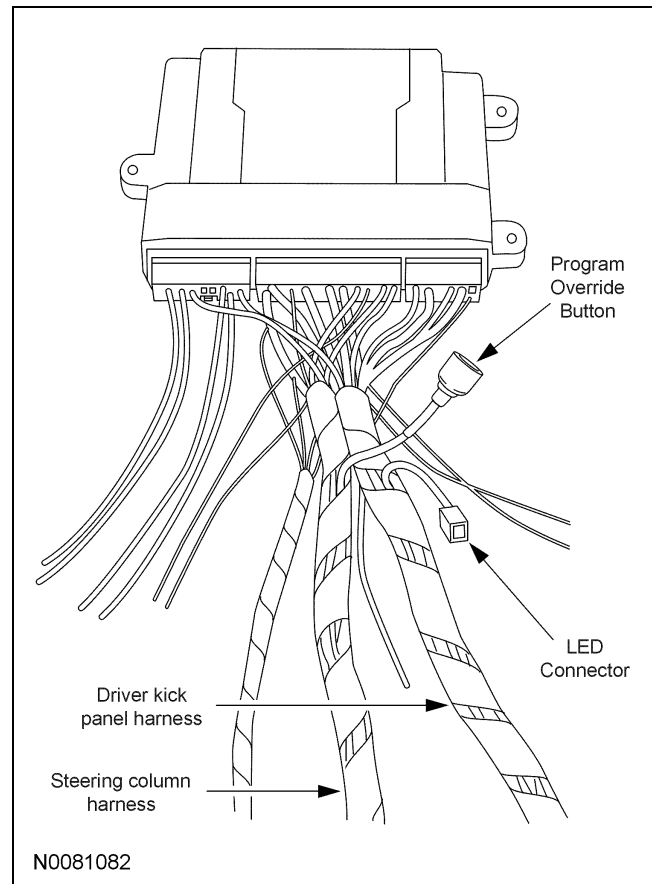


6. **NOTE:** Do not cut the override programming button off of the harness, it is used for all installations.

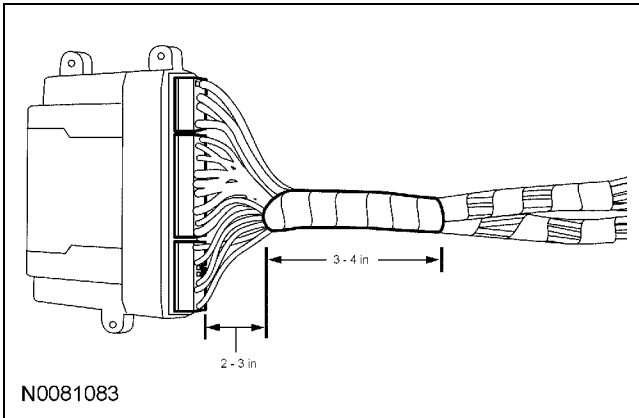
NOTE: For vehicle specific wiring diagram(s) [click here](#).

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.



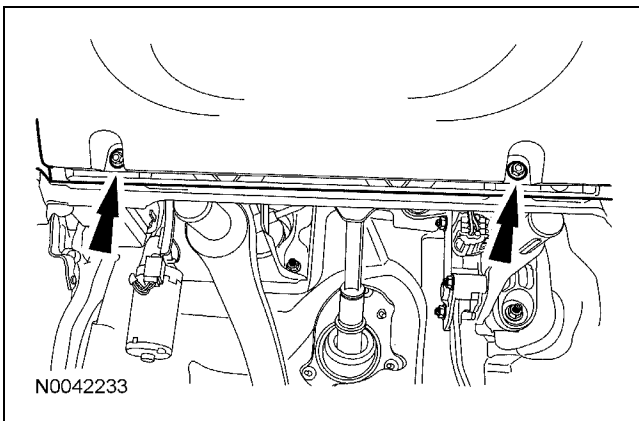
7. Tape the harness sections together, making sure to cover all of the unused wires.

INSTALLATION (Continued)

- 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.

Vehicle Preparation

8. Remove the 2 screws and the steering column opening cover.



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

Dipole Antenna Mounting

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

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

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

Install The Dipole Antenna

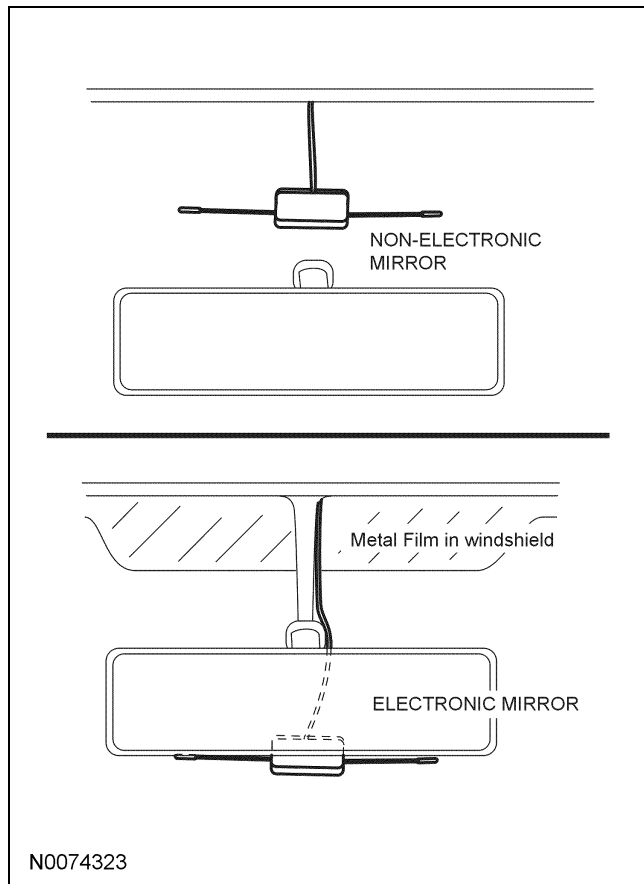
12. Clean the mounting surface using an alcohol base solution and a clean cloth.

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

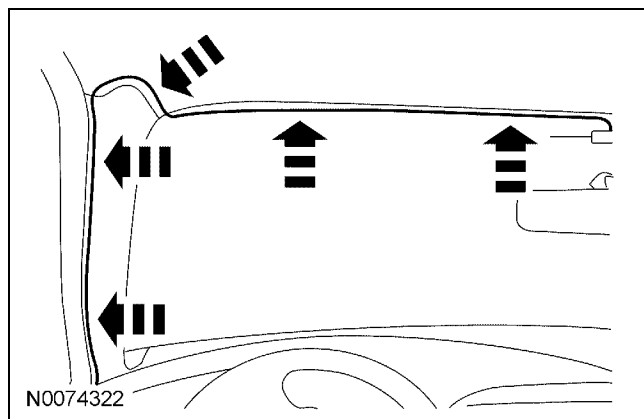
NOTE: Make sure that the long wire on the antenna is pointing toward the top of the windshield since this wire will be routed along the headliner.

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

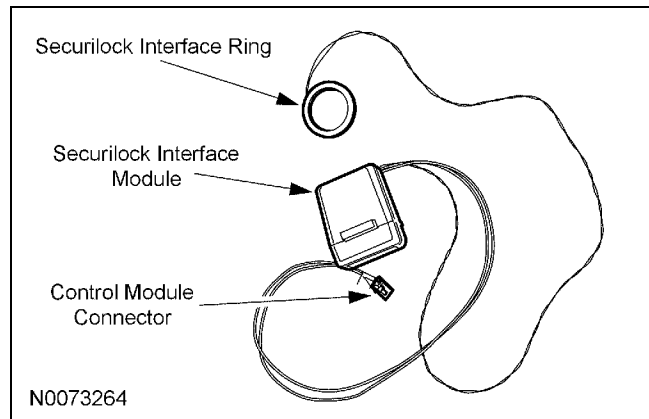
Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the windshield.

INSTALLATION (Continued)

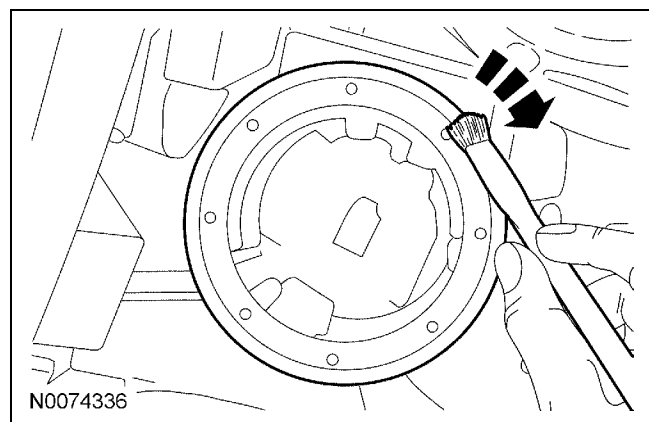
14. Route the dipole antenna cable along the headliner and down the A pillar toward the floor. The wire can be tucked behind the headliner without removing or loosening any of the trim panels.

**Install The Securilock Interface Kit**

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



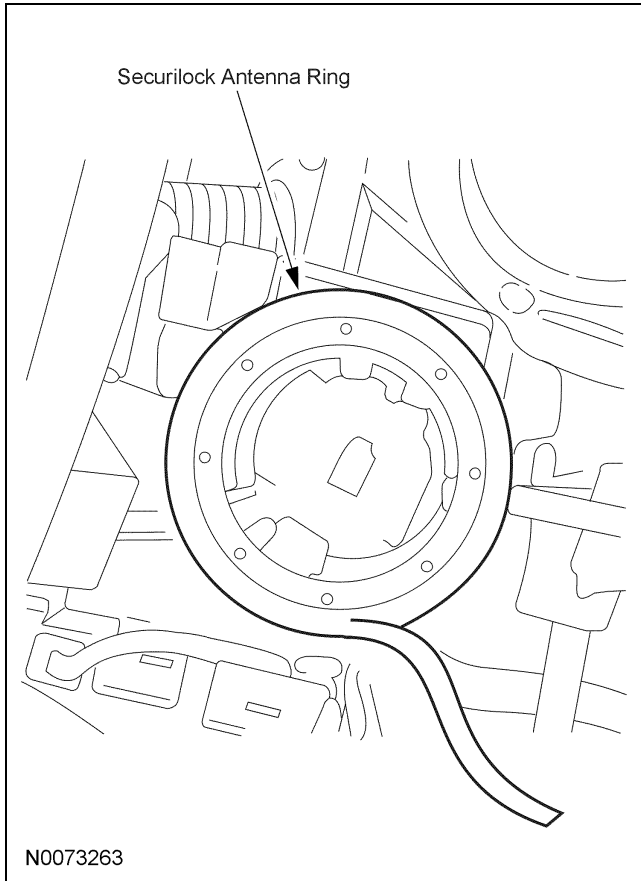
16. Following the directions on the supplied tube of adhesive primer, apply a thin coating around the transceiver antenna coil and allow to dry for approximately 5 minutes.



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

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

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

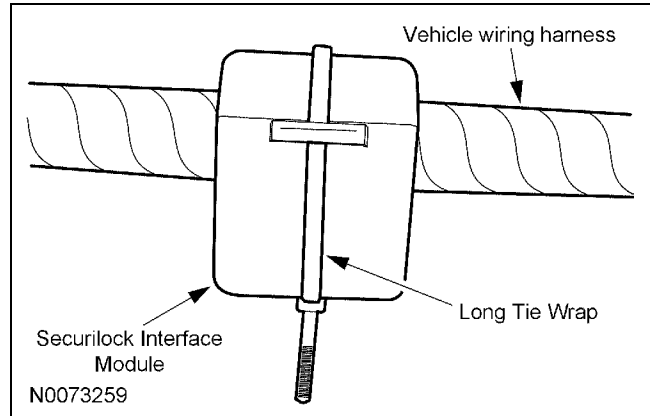
INSTALLATION (Continued)**Install The Securilock Interface Module**

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

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

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

Route the harness and connector to the module mounting location.

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

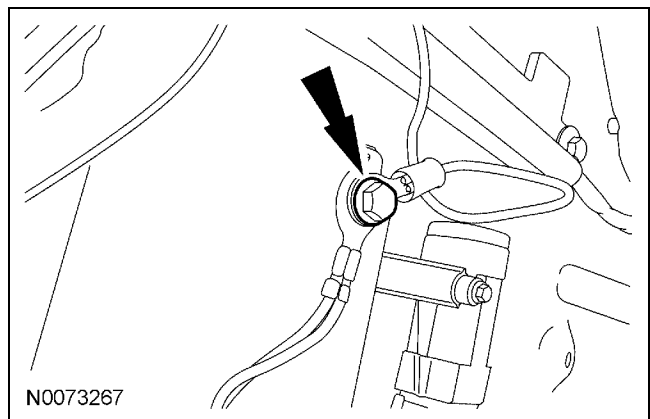
20. Place the control module and harness assembly in the vehicle.

Identify Circuit Wires For Connections

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

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

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



INSTALLATION (Continued)

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

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

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

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

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

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

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

25. Connect the Orange wire from the control module harness to the Violet/Green heater circuit wire at the ignition switch harness.

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

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

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

27. Connect the Violet wire from the control module harness to the harness Blue/White starter circuit wire at the ignition switch harness.

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

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

Identify the Blue/Gray Key-in-sense circuit wire at the steering column harness.

29. Connect the Black/White wire from the control module harness to the Blue/Gray Key-in-sense circuit wire at the steering column harness.

30. **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.

31. Connect the Brown/Black wire from the control module harness to the Blue/White horn circuit wire in the steering column harness.

32. **NOTE:** A DVOM connected to the correct wire will show 0V, when the Headlight Switch is in the park lamp position, 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 in the park lamp position, then show open when the headlight switch is OFF.

Identify the Gray parking light on circuit wire at the headlight switch.

33. Connect the White wire from the control module harness to the Gray parking light on circuit at the headlight switch.

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

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

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

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

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

INSTALLATION (Continued)

35. Connect the Black/White wire from the control module harness to the Green/Blue dome light circuit wire at the headlight dimmer switch harness.
36. **NOTE:** A DVOM connected to the correct wire will show 12V with the vehicle door(s) open and the dome light ON, then show 0V with the vehicle door(s) closed and the dome light OFF.
NOTE: A logic probe connected to the correct wire will show power with the vehicle door(s) open and the dome light ON, then show ground with the vehicle door(s) closed and the dome light OFF.
NOTE: Be sure that the dome light has timed out and is OFF before performing the door closed test.
Be sure that the dome lamp is illuminated before performing the door open test.
Identify the Yellow/Gray dome light circuit wire at the driver kick panel harness.
37. Connect the Green/Violet wire from the control module harness to the Yellow/Gray dome light circuit wire at the driver kick panel harness.
38. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the door lock switch is pressed.
A logic probe will show open on the correct wire, then show ground when the door lock switch is pressed.
Identify the Grey/Yellow power door lock circuit wire at the driver kick panel harness.
39. Connect the Blue wire from the control module harness to the Grey/Yellow power door lock circuit at the driver kick panel harness.
40. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V while depressing the door unlock switch.
A logic probe will show open on the correct wire, then show ground while depressing the door unlock switch.
Identify the Violet/Gray door unlock switch circuit wire at the driver kick panel harness.
41. Connect both the Green and the Light Green wires from the control module harness to the Violet/Gray door unlock switch circuit wire at the driver kick panel harness.
42. **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 Gray/Brown power door lock motor circuit wire at the driver kick panel harness.
43. Connect the White/Blue wire from the control module harness to the Gray/Brown power door lock motor circuit wire at the driver kick panel harness.
44. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the driver door unlock switch is pressed.
A logic probe will show ground on the correct wire, then show power when the driver door unlock switch is pressed.
Identify the Blue/Green driver power door unlock motor circuit wire at the driver kick panel harness.
45. Connect the Brown wire from the control module harness to the Blue/Green driver power door unlock motor circuit wire at the driver kick panel harness.
46. **NOTE:** Vehicles without factory perimeter alarm skip this step.
NOTE: A DVOM connected to the correct wire will show 0V, then show 12V when the factory alarm disarm switch is activated.
A logic probe will show ground on the correct wire, then show power when the factory alarm disarm switch is activated.
Identify the Green/Violet factory alarm disarm circuit wire at the driver kick panel harness.
47. Connect the Light Green/Black wire from the control module harness to the Green/Violet factory alarm disarm circuit wire at the driver kick panel harness.

INSTALLATION (Continued)

48. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the hatch/trunk release switch is pressed.

A logic probe will show open on the correct wire, then show ground when the hatch/trunk release switch is pressed.

Identify the Brown flip out glass circuit wire at the driver kick panel harness.

49. Connect the Blue/Green wire from the control module harness to the Brown flip out glass circuit wire at the driver kick panel harness.

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

Identify the Violet/White brake switch circuit wire at the driver kick panel harness.

51. Connect the Brown wire from the control module harness to the Violet/White brake switch circuit wire at the driver kick panel harness.

Optional Connections/Features - Driver Door Priority Unlock

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

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

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

53. Cut the Blue/Green door unlock circuit wire at the driver kick panel harness.

54. Connect the following wires to the side of the Blue/Green door unlock circuit wire going to the back towards the back of the vehicle.

- Tan/Red wire from the control module harness.

NOTE: Vehicles with factory RKE only

Brown wire from the control module harness.

55. Connect the Tan wire from the control module harness to the Remaining side of the cut Blue/Green door unlock circuit wire.

Optional Connections/Features - Headlights

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

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

Identify the Blue/White headlight circuit wire at the headlight switch.

57. Connect the Red/White wire from the control module harness to the Blue/White headlight circuit wire at the headlight switch.

Optional Connections/Features - Memory Seats

58. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the memory seat function is activated.

A logic probe will show open on the correct wire, then show ground when the memory seat function is activated.

Identify the Violet/White memory seat 1 circuit wire at the center console harness.

59. Connect the Green/White wire from the control module harness to the Violet/White memory seat 1 circuit wire at the center console harness.

60. Identify the Yellow memory seat 2 circuit wire at the center console harness.

61. Connect the Yellow/Green wire from the control module harness to the Yellow memory seat 2 circuit wire at the center console harness.

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

62. **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.

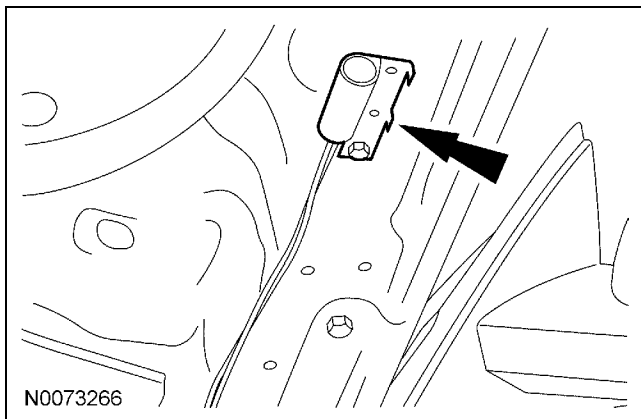
NOTE: The switch should be positioned about 30 degrees below parallel to the ground to accommodate for parking on inclines.

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

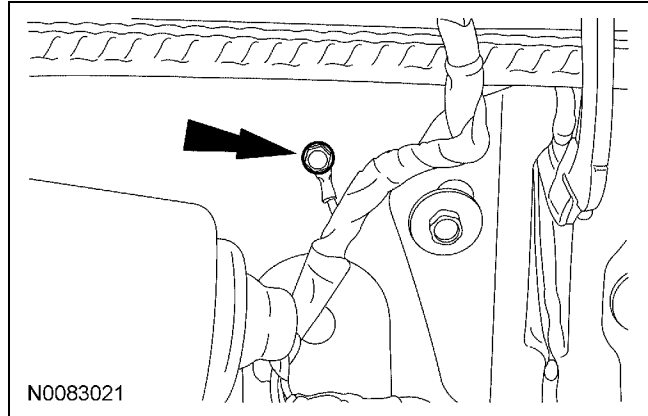
- False alarm trips
- Non-Remote Start events
- Inadvertent shutdown during Remote Start

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

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

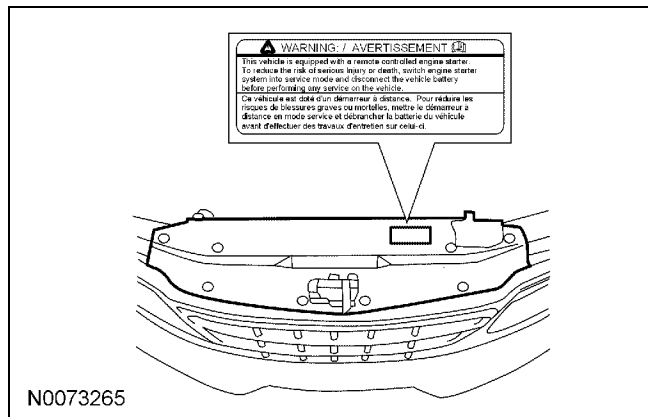


64. Connect hood switch ground wire to a suitable location on the bulkhead.



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

Install the underhood warning label



66. Route the Gray hood safety switch wire from the RKE/VSS/RMST control module through the bulkhead into the engine compartment and attach to the hood safety switch.
67. Connect the dipole antenna to the RKE/VSS/RMST control module.
68. Connect the SECURILOCK interface module to the RKE/VSS/RMST control module.

Power Connection

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

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

Identify the Violet/Red battery circuit wire in the ignition switch harness.

REMOVAL AND INSTALLATION (Continued)

70. Connect the two Red wires (A-4 and B-2) from the control module harness to the Violet/Red battery circuit wire in the ignition switch harness.

Program The RMST System

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

Secure RMST Harness and Control Module

72. Use the supplied tie wraps to secure the harness wires.

73. **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 control module to the underdash wiring harness.

Install Trim

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

75. Install the upper and lower steering column shrouds.

Install the 3 screws.

76. Install the steering column opening cover.

Install the 2 screws.

GENERAL PROCEDURES

Programming

Programming the Module

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

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

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

NOTE: The remote start override button must be accessible.

Programming Options: Entering Programming Mode

- See chart below for programming information.

Option Bank - 1 Chart (4 - Honks)

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

Option Bank - 2 Chart (5 - Honks)

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

Option Bank - 3 Chart (6 - Honks)

BANK	OPTIONS	DESCR	LED
3	1	DRIVER PRIORITY UNLOCK	NOTE 2

Option Bank - 4 Chart (7 - Honks)

BANK	OPTIONS	DESCR	LED
4	1	TACHLESS MODE	ON

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

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

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

GENERAL PROCEDURES (Continued)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

NOTE: The remote start module is now programmed.

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

Programming the SECURILOCK

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

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


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

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

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

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

GENERAL PROCEDURES (Continued)

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

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

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

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

23. 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

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)

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

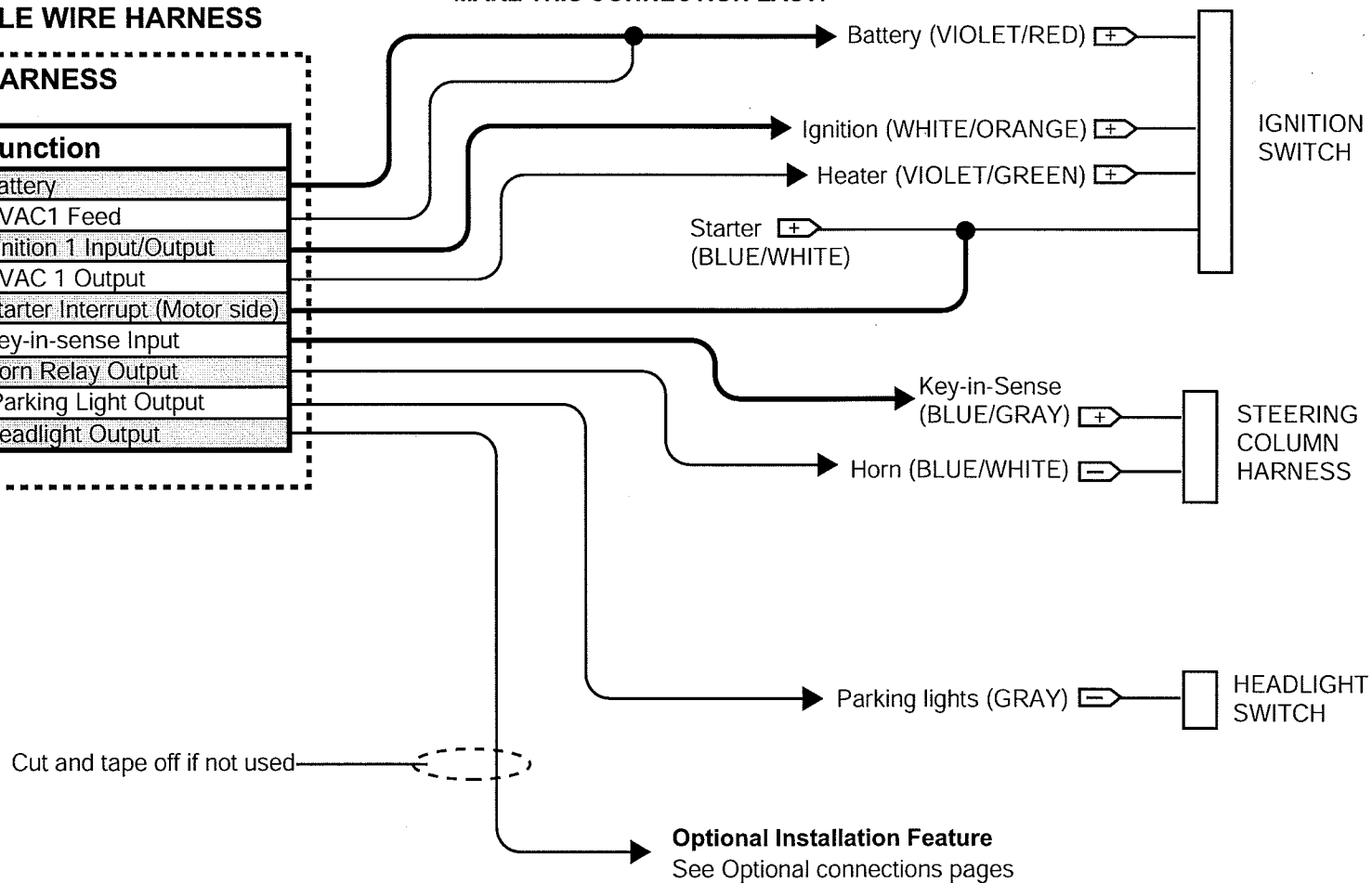
'08 Explorer/Mountaineer/Sport Track

RKE/VSS/RMST MODULE WIRE HARNESS

STEERING COLUMN HARNESS

	Color	Function
A-4	RED	Battery
B-2	RED	HVAC1 Feed
A-7	PINK	Ignition 1 Input/Output
B-4	ORANGE	HVAC 1 Output
A-8	VIOLET	Starter Interrupt (Motor side)
B-8	BLACK/WHITE	Key-in-sense Input
A-21	BROWN/BLACK	Horn Relay Output
A-1	WHITE	Parking Light Output
C-10	RED/WHITE	Headlight Output

MAKE THIS CONNECTION LAST!



'08 Explorer/Mountaineer/Sport Track

MAKE THIS CONNECTION FIRST!

CHASSIS GROUND POINT
IN DRIVERS KICK PANEL

RKE/VSS/RMST MODULE WIRE HARNESS

DRIVERS SIDE KICK PANEL HARNESS

	Color	Function
A-5	BLACK	Ground
A-3	BLACK/WHITE	Dome Light Output
A-20	GREEN/VIOLET	Door Ajar Switch Input
A-2	BLUE	Door Lock Output
A-14	GREEN	Door Unlock Output
A-12	LT.GREEN	Unlock Switch Sense Input
A-11	WHITE/BLUE	Arm Input
A-9	BROWN	Disarm Input
C-4	LT GREEN/BLACK	Factory Alarm Disarm
A-24	BLUE/GREEN	Trunk Release Output
B-7	BROWN	Brake Input
C-12	GREEN/WHITE	Memory Seat 1 Output
C-13	YELLOW/GREEN	Memory Seat 2 Output

Optional Installation Feature
See Optional connections page

Cut and tape off if not used

UNDERHOOD HARNESS

	Color	Function
A-19	GRAY	Hood Open Switch Input

Vehicle
Interior

Underhood

Chassis
ground

Do Not Ground to Hood!

DIMMER
SWITCH

DRIVERS
KICK
PANEL

HOOD TILT SWITCH

Connect only on vehicle's equipped with
factory perimeter alarm

Dome Light Output(GREEN/BLUE)

Dome Light (YELLOW/GRAY)

Door Lock (GRAY/YELLOW)

Door Unlock (VIOLET/GRAY)

Lock Motor (GRAY/BROWN)

Driver Door Unlock Motor
(BLUE/GREEN)

Factory Alarm Disarm
(GREEN/VIOLET)

Flip Out Glass
(BROWN)

Brake light (VIOLET/WHITE)

OPTIONAL CONNECTIONS / FEATURES

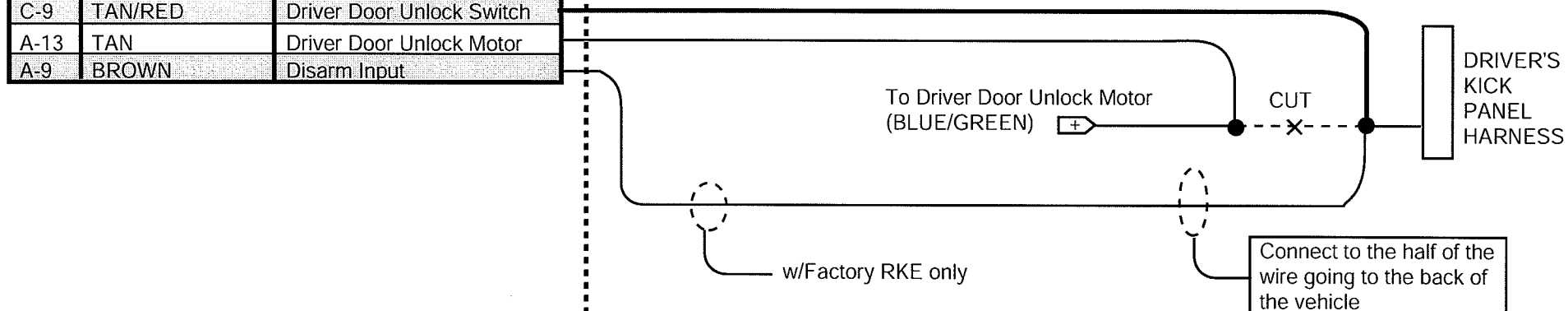
RKE/VSS/RMST MODULE WIRE HARNESS

DRIVER'S DOOR PRIORITY UNLOCK

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

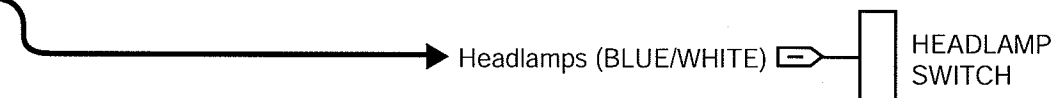
OPTION PROGRAMMING REQUIREMENTS

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



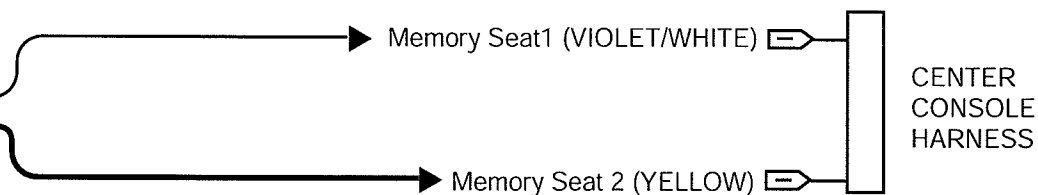
HEADLIGHTS

	Color	Function
C-10	RED/WHITE	Headlight Output



MEMORY SEATS (IF EQUIPPED)

	Color	Function
C-12	GREEN/WHITE	Memory Seat 1 Output
C-13	YELLOW/GREEN	Memory Seat 2 Output



[Manual Table of Contents](#)

RKE/VSS/REMOTE START SYSTEM INSTALLATION

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[RKE/VSS/Remote Start](#)

GENERAL PROCEDURES

[Proper Splicing Techniques](#)

[Programming](#)

[Functional Test](#)

[Shock Sensor Setting](#)

[Troubleshooting](#)

WIRING DIAGRAMS

[Vehicle Specific Wiring Diagrams](#)

INSTALLATION

Remote Start

F-150/Mark LT

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

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

1. Verify correct kit number.

Review RKE/VSS/RMST Installation Kit Contents

NOTE: Use kit number 7L3Z-19G364-AA REMOTE START SYSTEM

NOTE: Kits are vehicle specific and are not interchangeable.

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

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

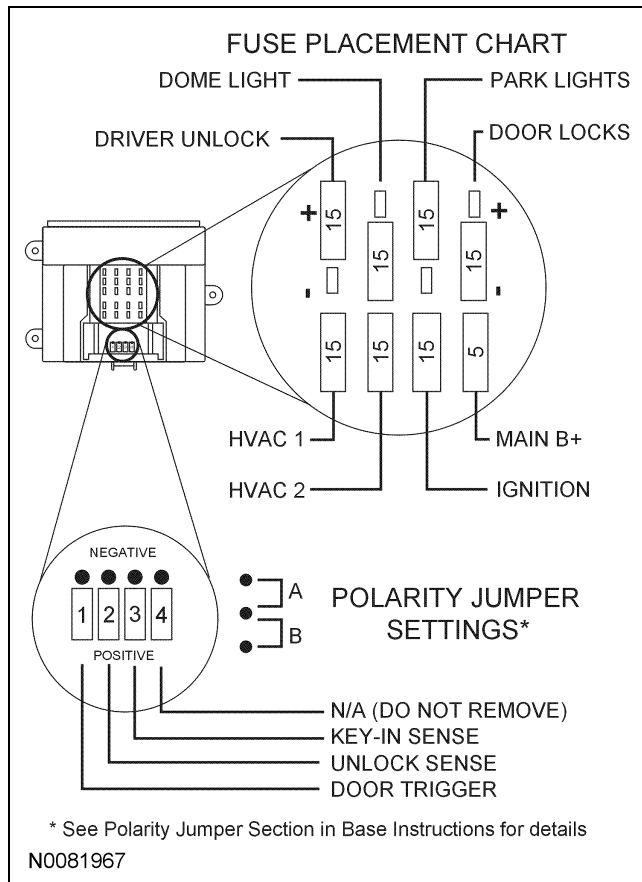
QUANTITY	DESCRIPTION
1	MODULE ASSEMBLY
1	RKE/VSS/RMST SOFTWARE CARTRIDGE ASSEMBLY
2	6 BUTTON POWERCODE TRANSMITTER
3	WIRING HARNESS ASSEMBLIES
1	DIPOLE ANTENNA
1	HOOD SAFETY SWITCH ASSEMBLY
1	INSTALLATION PARTS BAG
1	FUSE PARTS BAG
1	OPERATORS INSTRUCTIONS

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

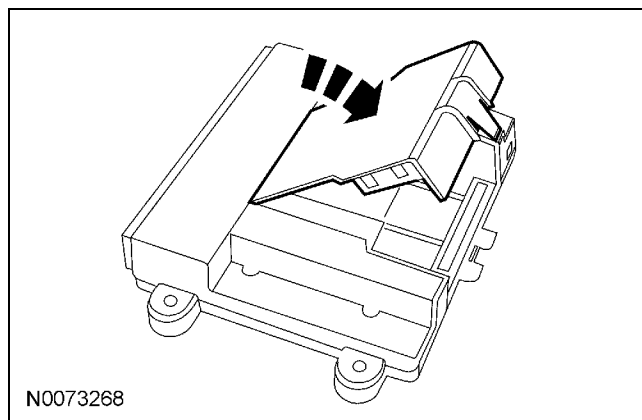
QUANTITY	DESCRIPTION
1	OPERATORS QUICK REFERENCE WALLET CARD
1	UNDERHOOD WARNING LABEL
1	SECURILOCK INTERFACE KIT (SOLD SEPARATELY AND REQUIRED FOR VEHICLES W/PATS)
1	RELAY (P/N: YL3Z-19G390-AA)

Module Preparation

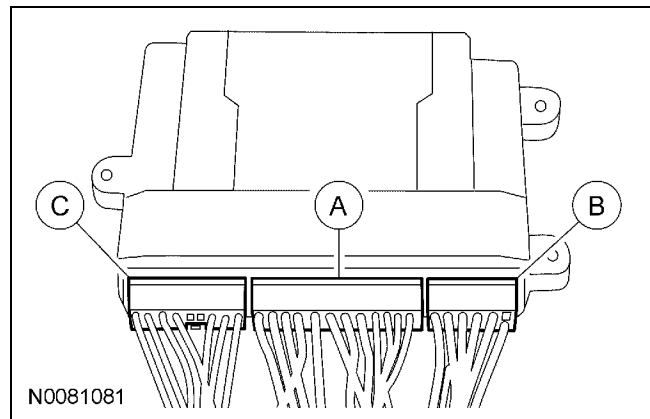
3. Place the supplied fuses into the power distribution block on the remote start control module.
 - Move the polarity jumpers to their proper locations on the control module, see illustration.

INSTALLATION (Continued)

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



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



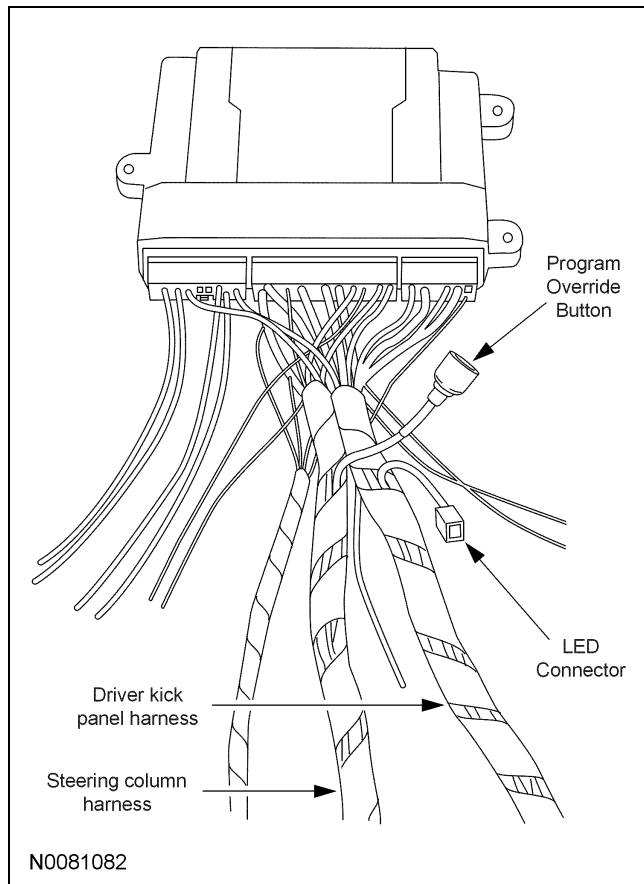
6. **NOTE:** Do not cut the override programming button off of the harness, it is used for all installations.

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

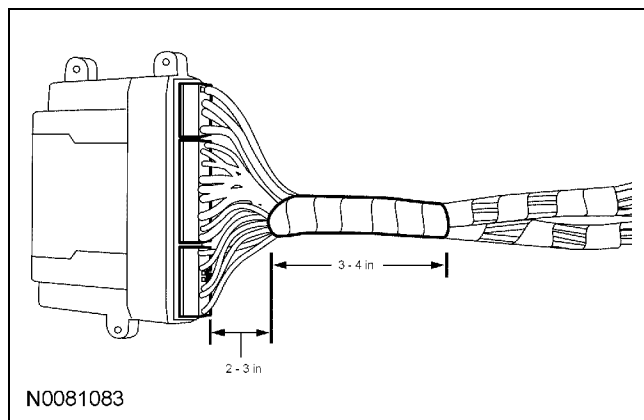
Splice the following wire to the A-4 Red wire in the A connector of the control module approximately 8 inches from the connector

- B-2 Red wire in the B connector.

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

INSTALLATION (Continued)

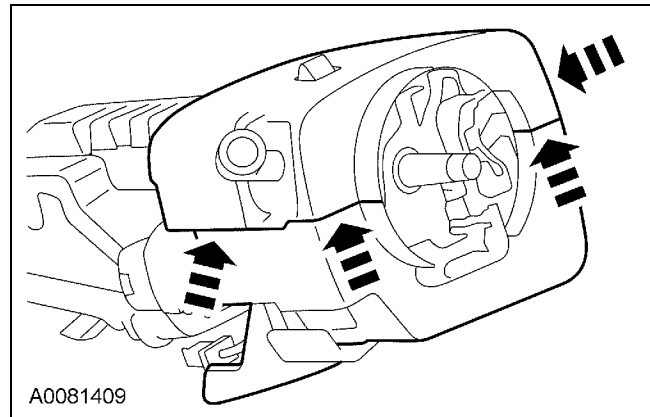
8. Tape the harness sections together, making sure to cover all of the unused wires.

**Vehicle Preparation - All Vehicles**

9. Remove steering column opening trim and reinforcement.
10. Remove the lower steering column shroud screw.

11. Apply inward pressure to the upper and lower steering column shroud cover seam to separate then position the lower shroud as far down as possible.

NOTE: Steering wheel removed for clarity.



12. Remove the 3 screws, pull out to release the top retaining clips and lower the lower steering column opening cover.
13. Remove the LH scuff plates and cowl trim panels.

Dipole Antenna Mounting

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

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

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

INSTALLATION (Continued)

Install The Dipole Antenna

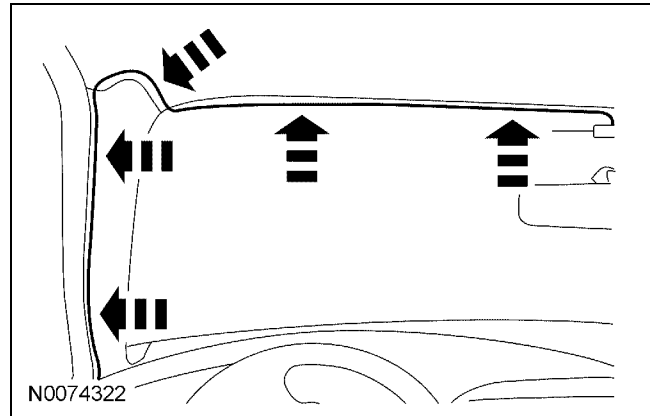
15. Clean the mounting surface using an alcohol base solution and a clean cloth.

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

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

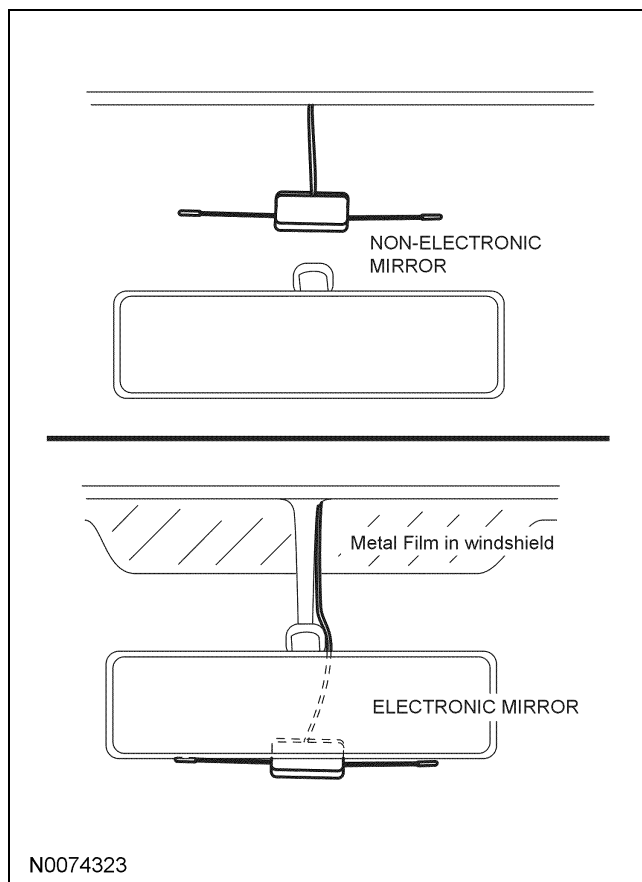
NOTE: The wire will be attached to the control module later in this procedure.

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

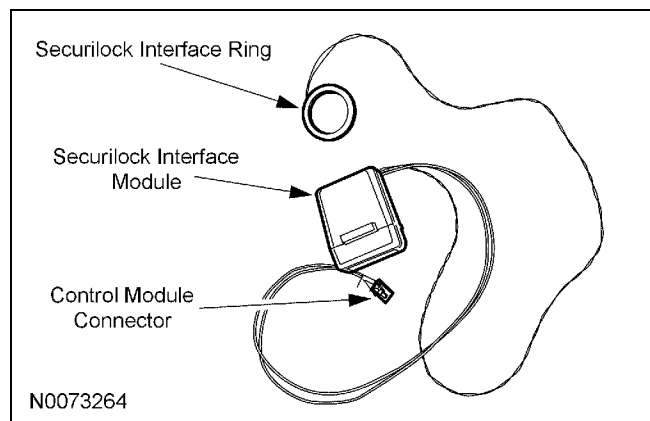


Install The Securilock Interface Kit

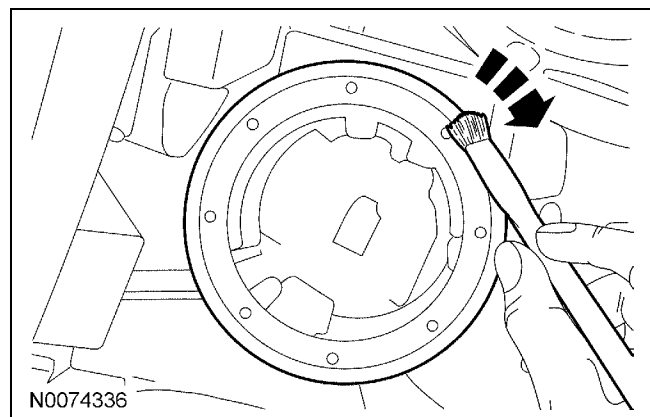
18. Route the ring of the SECURILOCK interface antenna lead up along the steering column to the PATS transceiver location.



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



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.

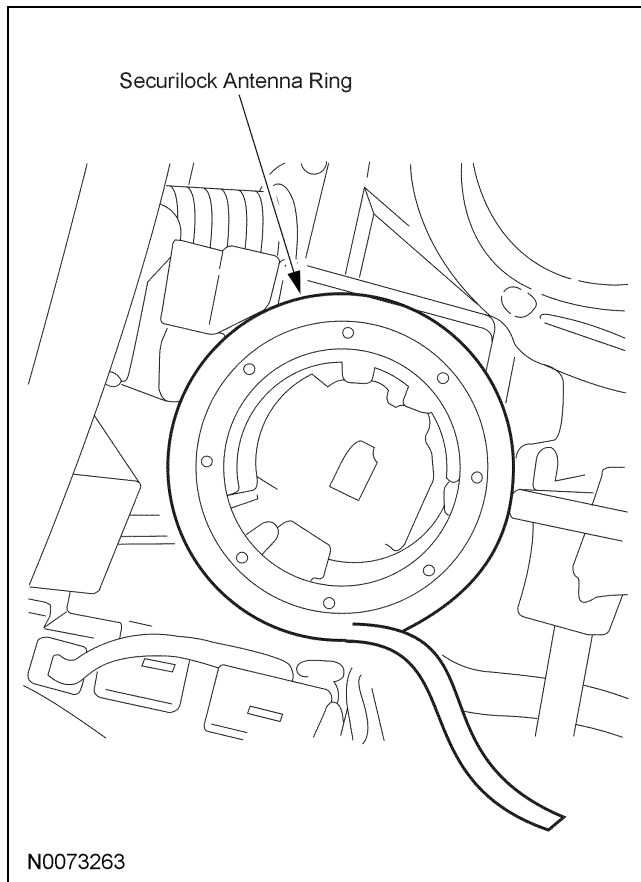


INSTALLATION (Continued)

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.

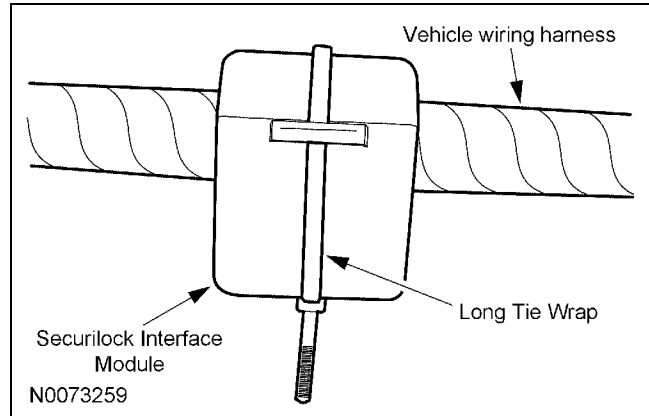
**Install The Securilock Interface Module**

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

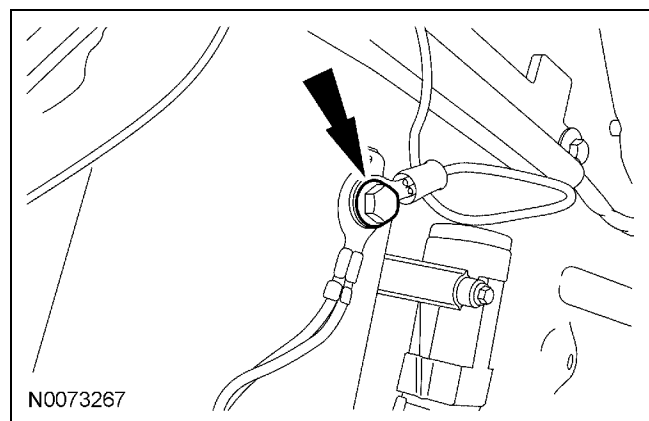
23. Place the RKE/VSS/RMST control module and harness assembly in the vehicle.

Identify Circuit Wires For Connections

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

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

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



INSTALLATION (Continued)

25. **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 in the body harness under driver scuff plate.

26. Connect the Green/Violet wire from the control module harness to the Black/Light Blue dome light circuit.

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

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

Identify the Pink/Yellow door lock circuit wire at the driver kick panel harness location.

28. Connect the Blue wire from the control module harness to the Pink/Yellow door lock circuit wire at the driver kick panel harness location.

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

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

Identify the Pink/Light Green door unlock circuit wire at the driver kick panel harness location.

30. Connect the Green wire from the control module harness to the Pink/Light Green door unlock circuit wire at the driver kick panel harness location.

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

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

Identify the Pink/Black lock motor circuit wire at the driver kick panel harness location.

32. Connect the White/Blue wire from the control module harness to the Pink/Black lock motor circuit wire at the driver kick panel harness location.

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

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

Identify the Red/Orange driver door unlock motor circuit wire at the driver kick panel harness location.

34. Connect the Brown wire from the control module harness to the Red/Orange driver door unlock motor circuit wire at the driver kick panel harness location.

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

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

Identify the Pink/Orange unlock switch sense circuit wire at the driver side rear sill plate harness location.

36. Connect the Light Green wire from the control module harness to the Pink/Orange unlock switch sense circuit wire at the driver side rear sill plate harness location.

INSTALLATION (Continued)

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

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

Identify the Dark Blue/Light Green ignition circuit wire at the ignition switch harness.

38. Connect the Pink wire from the control module harness to the Dark Blue/Light Green ignition circuit wire at the ignition switch harness.

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

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

Identify the Black/Light Green heater circuit wire at the ignition switch harness.

40. Connect the Orange wire from the control module harness to the Black/Light Green heater circuit wire at the ignition switch harness.

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

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

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

42. Connect the Violet wire from the control module harness to the harness Red/Light Blue starter circuit wire at the ignition switch harness.

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

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

Identify the Black/Pink key-in-sense circuit wire in the steering column harness.

44. Connect the Black/White wire from the control module harness to the Black/Pink key-in-sense circuit wire in the steering column harness.

45. **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.

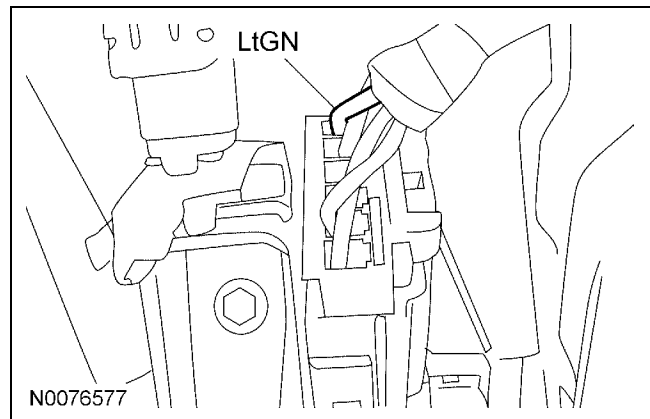
Identify the Dark Blue horn circuit wire in the steering column harness.

46. Connect the Brown/Black wire from the control module harness to the Dark Blue horn circuit wire in the steering column harness.

47. **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 brake switch circuit wire at the brake switch.



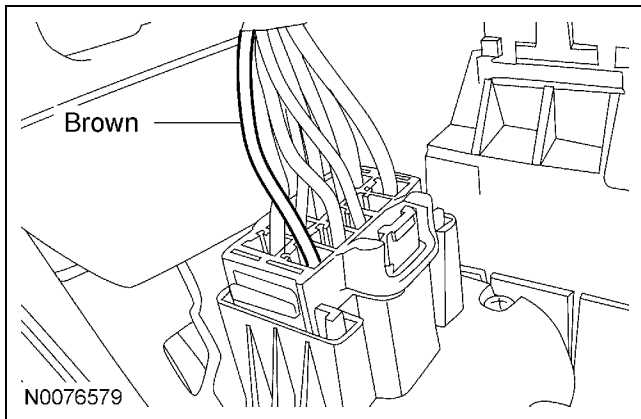
48. Connect the Brown wire from the control module harness to the Light Green brake switch circuit wire at the brake switch.

INSTALLATION (Continued)

49. **NOTE:** A DVOM connected to the correct wire will show 0V with the switch in the off position and 12V with the switch in the parking lights on position.

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

Identify the Brown parking lights circuit wire at the Headlight Switch.



50. Connect the White wire from the control module harness to the Brown parking lights circuit wire at the Headlight Switch.
51. **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 Orange/Light Green dome light output circuit wire at the dimmer switch.
52. Connect the Black/White wire from the control module harness to the Orange/Light Green dome light output circuit wire at the dimmer switch.

Install The Power Window, Moonroof, Sliding Backlite Interrupt Accessory Relay

53. Prepare the relay harness.

All Vehicles

54. Remove circuit 87 Yellow wire and terminal from the relay harness connector.
- Release the locking tab and pull the wire and terminal from the connector.
55. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the Ignition switch is in the RUN/START position.
- A logic probe will show ground on the correct wire, then show power when the Ignition switch is in the RUN/START position.
- Identify the Dark Blue/Light Green ignition wire at the ignition switch harness.
56. Connect the circuit 86 Black wire from the power window interrupt relay to the Dark Blue/Light Green ignition wire at the ignition switch harness.
57. Identify the Light Blue relay coil ground circuit wire at the right side of the steering column.
- NOTE:** Cutting this wire will disable all power windows, Moonroof and Sliding Backlite.
58. Cut the Light Blue relay coil ground circuit wire at the right side of the steering column.
- Connect the circuit 30 Blue wire from the power window interrupt relay to the feed side of the Light Blue relay coil ground circuit wire at the right side of the steering column.
 - Connect the circuit 87a Red wire from the power window interrupt relay to the load side of the Light Blue relay coil ground circuit wire at the right side of the steering column.
59. Connect the circuit 85 White wire from the power window interrupt relay harness to the Blue/Black wire from the control module harness.

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

60. **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.

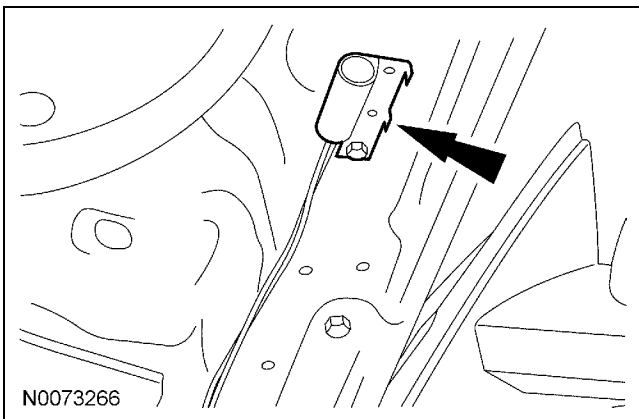
NOTE: The switch should be positioned about 30 degrees below parallel to the ground to accommodate for parking on inclines.

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

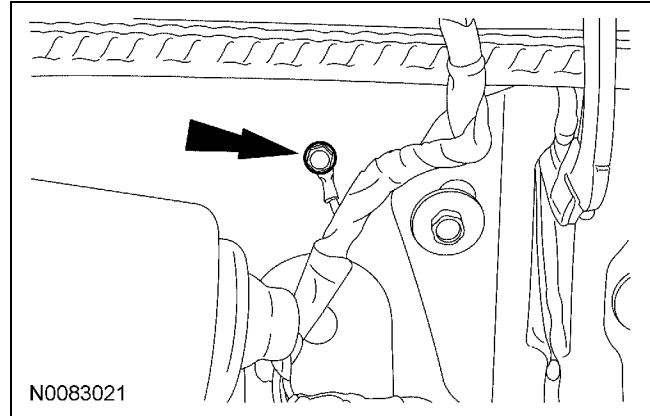
- False alarm trips
- Non-Remote Start events
- Inadvertent shutdown during Remote Start

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

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

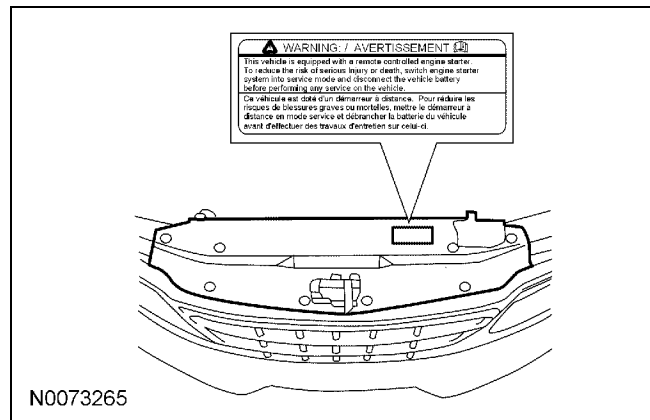


62. Connect hood switch ground wire to a suitable location on the bulkhead.



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

Install the underhood warning label



64. Route the Gray hood safety switch wire from the RKE/VSS/RMST control module through the bulkhead into the engine compartment and attach to the hood safety switch.
65. Connect the dipole antenna to the RKE/VSS/RMST control module.
66. Connect the SECURILOCK interface module to the RKE/VSS/RMST control module.

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

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

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

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

Identify the Red/Orange driver door unlock motor circuit wire at the driver kick panel harness.

68. Cut the Red/Orange driver door unlock motor circuit wire at the driver kick panel harness

69. Connect the Tan wire from the control module harness to the cut Red/Orange driver door unlock motor circuit wire going toward the front of the vehicle.

70. Connect the following wires to the cut Red/Orange driver door unlock motor circuit wire going toward the back of the vehicle

- Tan/Red wire from the control module harness.
- Brown wire from the control module harness. (If equipped with Factory RKE)

Optional Connections/Features - Rear Defroster

71. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the rear defrost switch is pressed.

A logic probe will show open on the correct wire, then show ground when the rear defrost switch is pressed.

Identify the Dark Blue/Orange rear defroster circuit wire at the rear defrost switch.

72. Connect the Blue/White wire from the control module harness to the Dark Blue/Orange rear defroster circuit wire at the rear defrost switch.

Optional Connections/Features - Memory Seats

73. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the memory seat function is activated.

A logic probe will show open on the correct wire, then show ground when the memory seat function is activated.

Identify the Brown/Light Green memory seat 1 circuit wire at the driver seat harness location.

74. Connect the Green/White wire from the control module harness to the Brown/Light Green memory seat 1 circuit wire at the driver seat harness location.

75. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the memory seat function is activated.

A logic probe will show open on the correct wire, then show ground when the memory seat function is activated.

Identify the Black/Orange memory seat 2 circuit wire at the driver seat harness location.

76. Connect the Yellow/Green wire from the control module harness to the Black/Orange memory seat 2 circuit wire at the driver seat harness location.

Optional Connections/Features - Headlights

77. Prepare the relay harness.

78. Remove the circuit 87a Red wire and terminal from the relay harness connector.

- Release the locking tab and pull the wire and terminal from the connector.

79. Connect the circuit 87 Yellow wire to the circuit 86 Black wire.

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

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

This circuit is always hot.

Identify the Dark Blue/Orange battery circuit wire at the Headlight Switch.

INSTALLATION (Continued)

81. Connect the circuit 86 Black wire to the Dark Blue/Orange battery circuit wire at the Headlight Switch.
82. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V with the Headlight Switch in the ON position.
A logic probe will show ground on the correct wire, then show power with the Headlight Switch in the ON position.
Identify the Red/Yellow headlight circuit wire at the headlight switch.
83. Connect the Blue wire from the door lock relay harness to the Red/Yellow headlight circuit wire at the headlight switch.
84. Connect the White wire from the headlight illumination relay harness to the Red/White wire from the control module harness.

Power Connection

85. **NOTE:** A DVOM connected to the correct wire will show 12V with the key in any position.
A logic probe will show power on the correct wire with the key in any position.
Identify the Light Green/Violet Battery circuit wire in the ignition switch harness.

86. Connect the one Red wire from the control module harness to the one Light Green/Violet Battery circuit wire in the ignition switch harness.

Program The RKE/VSS/RMST System

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

Secure RKE/VSS/RMST Harness and Control Module

88. Use the supplied tie wraps to secure the RKE/VSS/RMST harness wires.
89. **NOTE:** Do not mount the control module in the knee bolster area.
To ensure the best performance of the built-in shock sensor, secure the control module at three points to the vehicle.
Use the supplied long tie wraps to mount the RKE/VSS/RMST control module to the underdash wiring harness.
90. Install the LH scuff plates and cowl trim panels.
91. Install the lower steering column shroud.
92. Install the lower steering column shroud screw.
93. Install the lower steering column opening cover.

GENERAL PROCEDURES

Programming

Programming the Module

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

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

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

NOTE: The remote start override button must be accessible.

Programming Options: Entering Programming Mode

- See chart below for programming information.

Option Bank - 1 Chart (4 - Honks)

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

Option Bank - 2 Chart (5 - Honks)

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

Option Bank - 3 Chart (6 - Honks)

BANK	OPTIONS	DESCR	LED
3	1	DRIVER PRIORITY UNLOCK	NOTE 2

Option Bank - 4 Chart (7 - Honks)

BANK	OPTIONS	DESCR	LED
4	1	TACHLESS MODE	ON

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

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

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

GENERAL PROCEDURES (Continued)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

NOTE: The remote start module is now programmed.

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

Programming the SECURILOCK

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

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

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

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

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

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

GENERAL PROCEDURES (Continued)

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



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

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

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

23. 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

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.

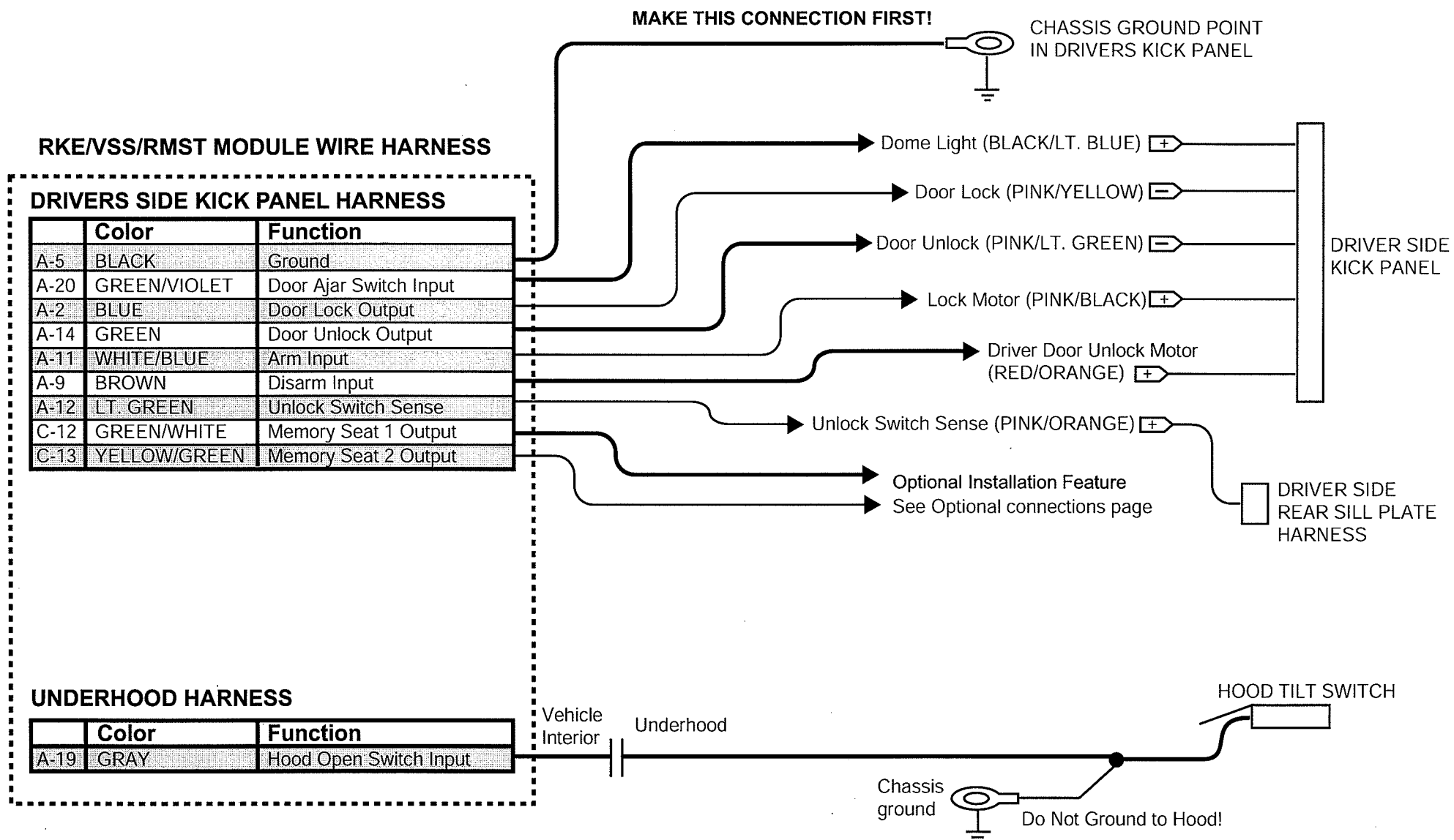
Example: Depress the remote start fob button for 3 seconds and then release. The vehicle horn will "chirp" one time to indicate that RMST signal was received. If the vehicle doesn't start and the horn "chirps" 3 times, there is a fault - "Vehicle Door is Open"

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)

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

'08 F-150/Mark LT



'08 F-150/Mark LT

RKE/VSS/RMST MODULE WIRE HARNESS

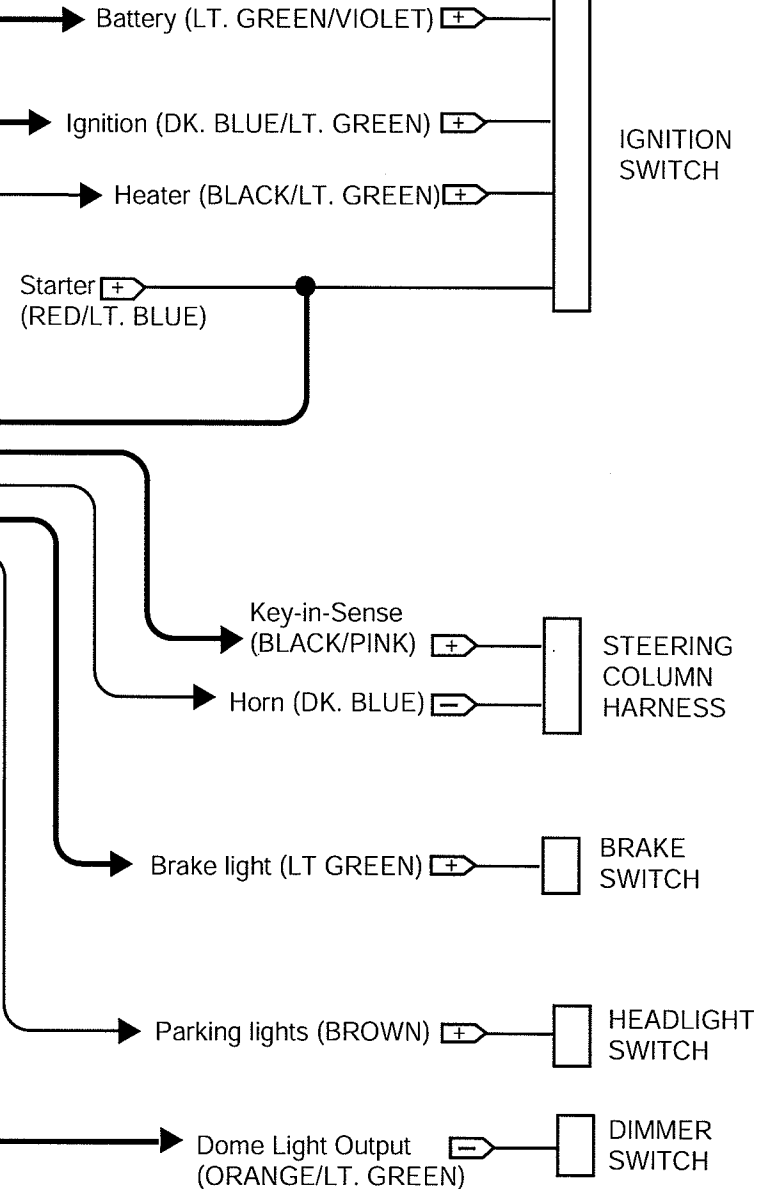
STEERING COLUMN HARNESS

	Color	Function
A-4	RED	Battery
B-2	RED	HVAC1 Feed
A-7	PINK	Ignition 1 Input/Output
B-4	ORANGE	HVAC 1 Output
A-8	VIOLET	Starter Output
B-8	BLACK/WHITE	Key-in-sense Input
A-21	BROWN/BLACK	Horn Relay Output
B-7	BROWN	Brake Input
A-1	WHITE	Parking Lights
A-3	BLACK/WHITE	Dome Light Output
C-10	RED/WHITE	Headlight Output
C-11	BLUE/WHITE	Rear Defrost Output

Cut and tape off if not used

Optional Installation Feature
See Optional connections

MAKE THIS CONNECTION LAST!



OPTIONAL CONNECTIONS / FEATURES

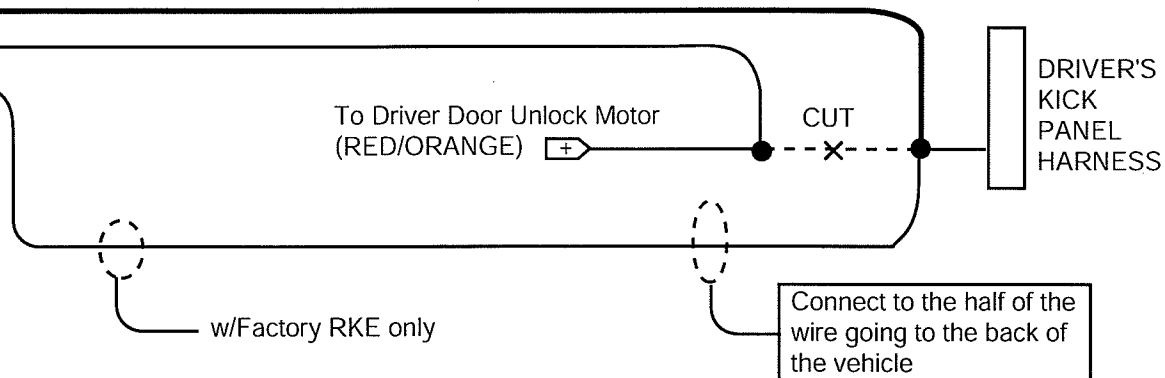
OPTION PROGRAMMING REQUIREMENTS

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

RKE/VSS/RMST MODULE WIRE HARNESS

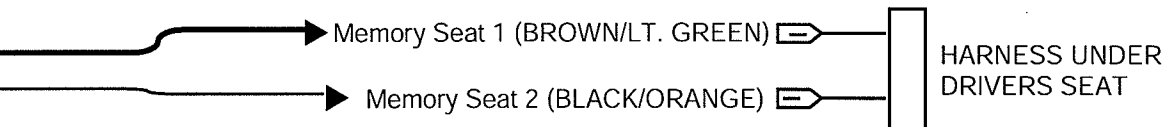
DRIVER'S DOOR PRIORITY UNLOCK

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



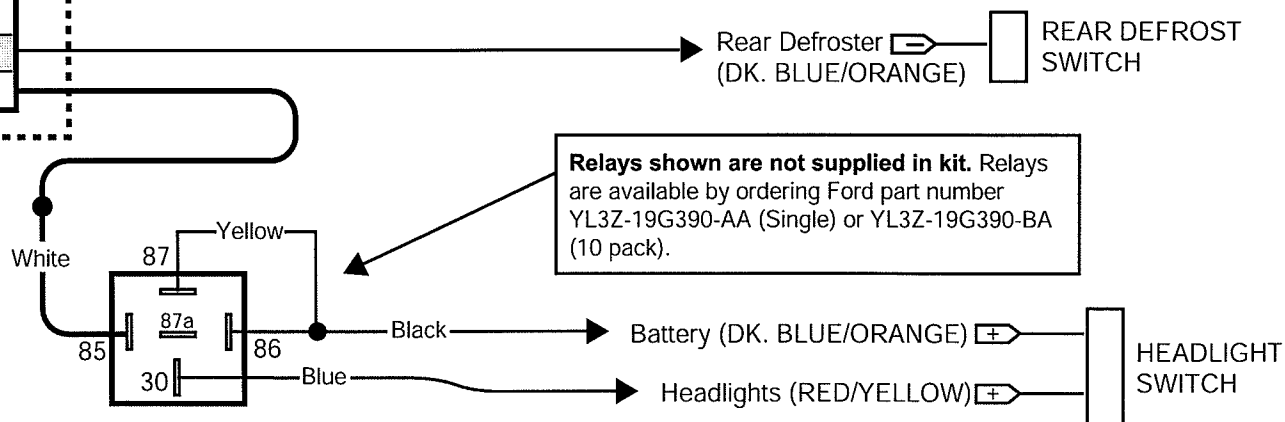
MEMORY SEATS (IF EQUIPPED)

	Color	Function
C-12	GREEN/WHITE	Memory Seat 1
C-13	YELLOW/GREEN	Memory Seat 2



HEADLIGHT ILLUMINATION / REAR DEFROSTER

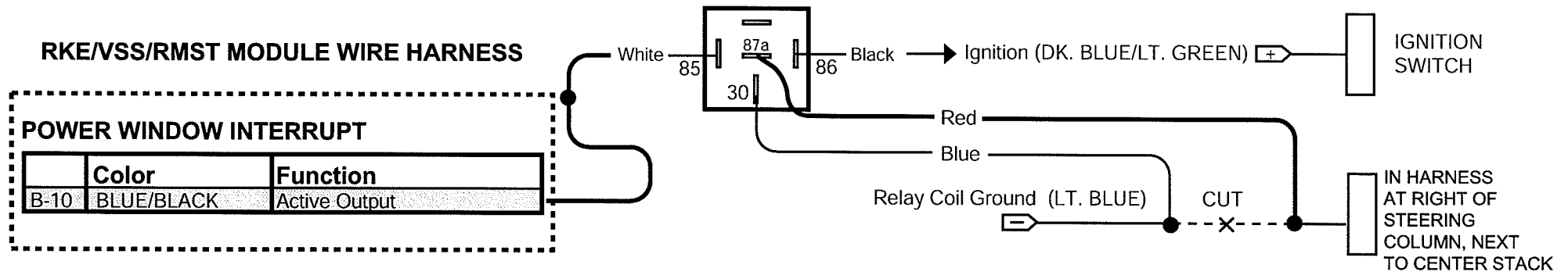
	Color	Function
C-11	BLUE/WHITE	Rear Defroster Output
C-10	RED/WHITE	Headlight Output



'08 F-150/Mark LT

POWER WINDOW, MOONROOF, POWER SLIDING BACKLITE INTERRUPT RELAY

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



[Manual Table of Contents](#)

RKE/VSS/REMOTE START SYSTEM INSTALLATION

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[RKE/VSS/Remote Start](#)

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[Proper Splicing Techniques](#)

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[Functional Test](#)

[Shock Sensor Setting](#)

[Troubleshooting](#)

WIRING DIAGRAMS

[Vehicle Specific Wiring Diagrams](#)

INSTALLATION

Remote Start

F-Super Duty

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

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

1. Verify correct kit number.

Review RKE/VSS/RMST Installation Kit Contents

NOTE: Use kit number 7L3Z-19G364-AA
REMOTE START SYSTEM

NOTE: Kits are vehicle specific and are not interchangeable.

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

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

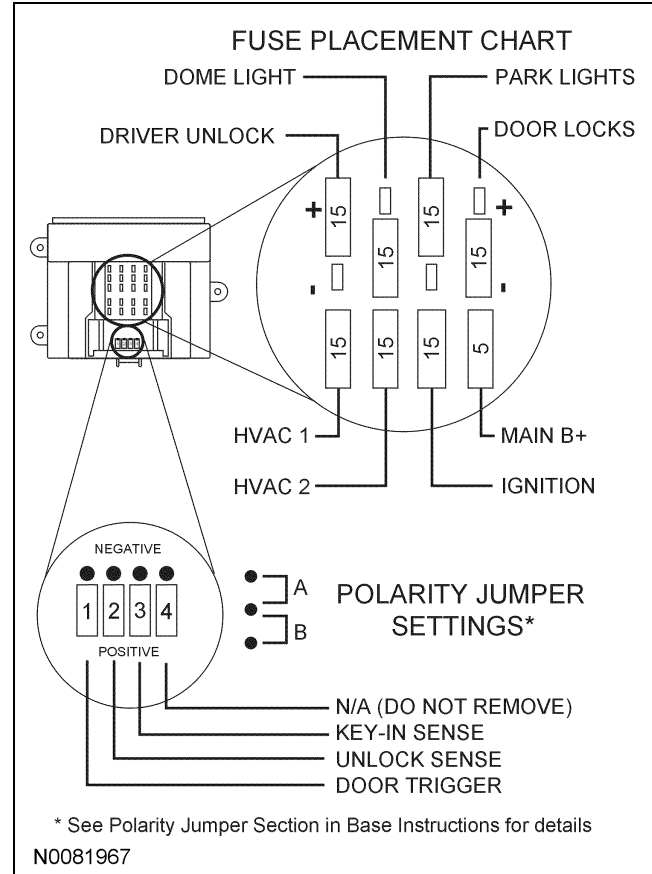
QUANTITY	DESCRIPTION
1	MODULE ASSEMBLY
1	RKE/VSS/RMST SOFTWARE CARTRIDGE ASSEMBLY
2	6 BUTTON POWERCODE TRANSMITTER
3	WIRING HARNESS ASSEMBLIES
1	DIPOLE ANTENNA
1	HOOD SAFETY SWITCH ASSEMBLY
1	INSTALLATION PARTS BAG
1	FUSE PARTS BAG
1	OPERATORS INSTRUCTIONS

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

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

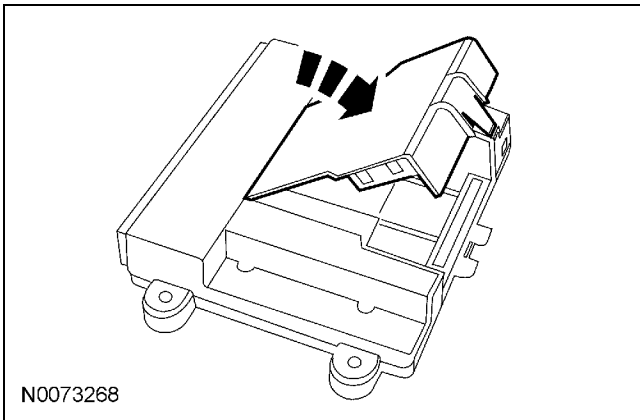
Module Preparation

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

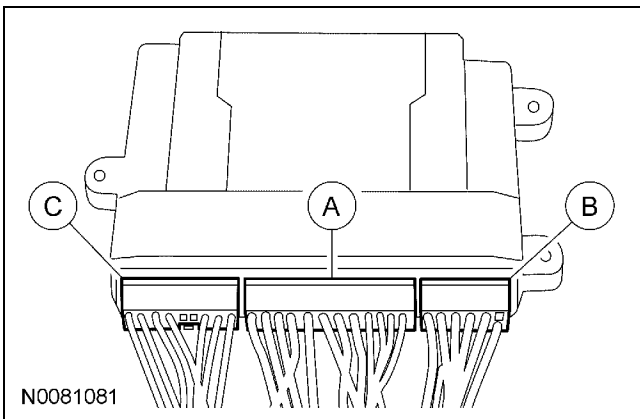


INSTALLATION (Continued)

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



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



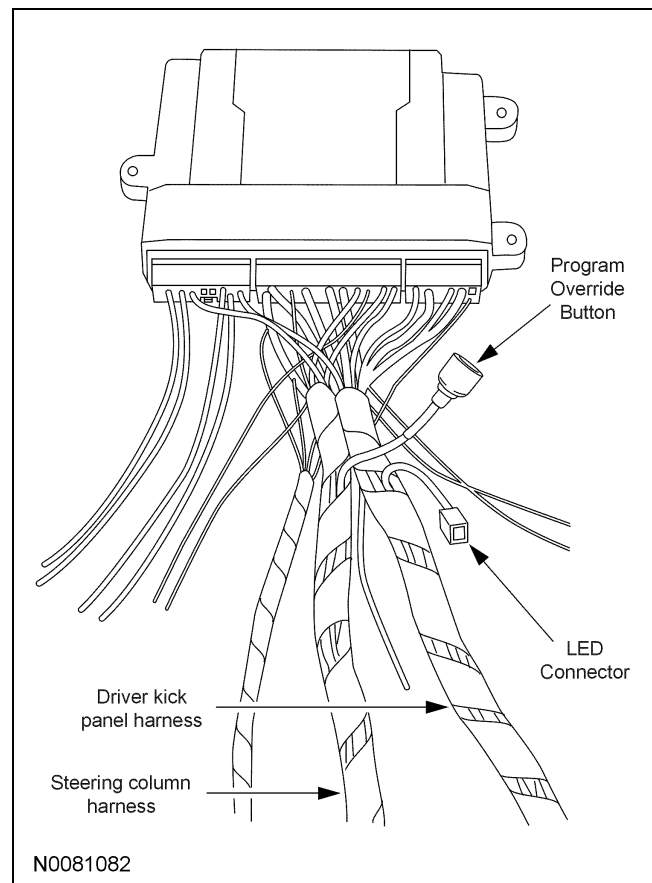
6. **NOTE:** Do not cut the override programming button off of the harness, it is used for all installations.

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

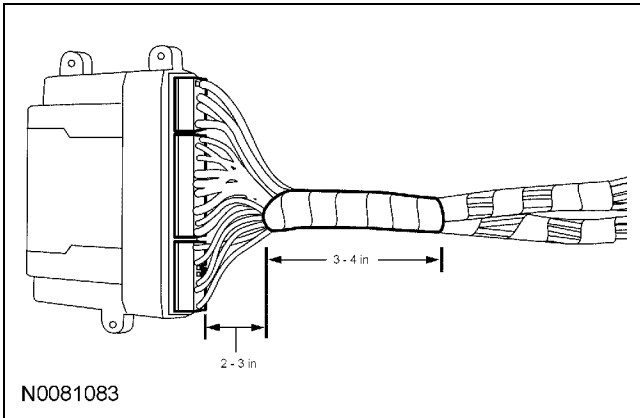
Splice the following wires to the B-2 Red wire in the B connector of the control module approximately 8 inches from the connector

- B-1 Blue wire in the B connector.

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



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

INSTALLATION (Continued)**Vehicle Preparation**

9. Remove the steering column opening trim.
10. Remove the tilt lever dust boot.
11. Remove the screw and the tilt lever.
12. Remove the 3 screws and the upper and lower steering column shrouds.
13. Remove the left hand scuff plate and cowl trim panel.
14. Remove the passenger door sill plate.

Dipole Antenna Mounting

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

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

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

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

Install The Dipole Antenna

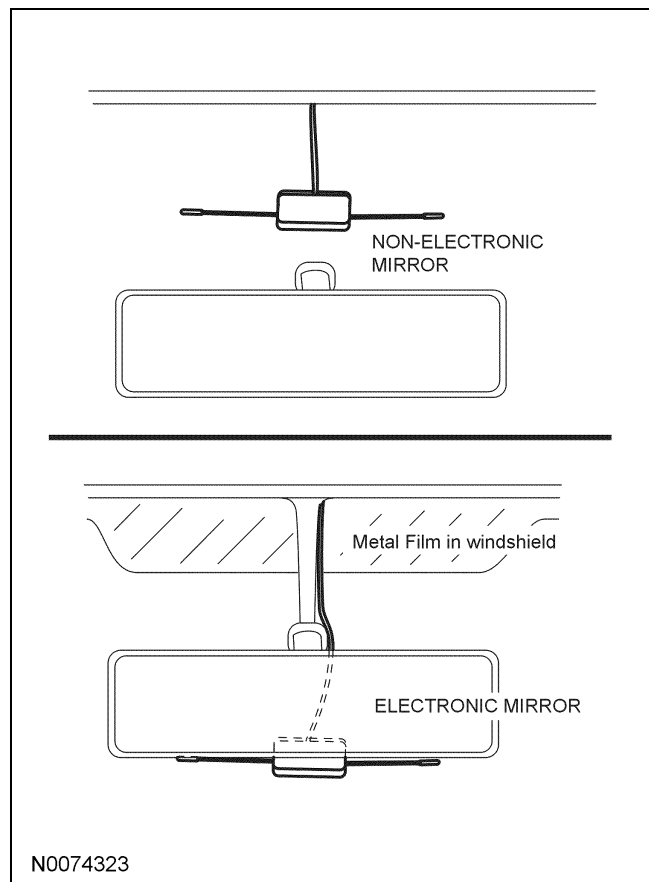
16. Clean the mounting surface using an alcohol base solution and a clean cloth.

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

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

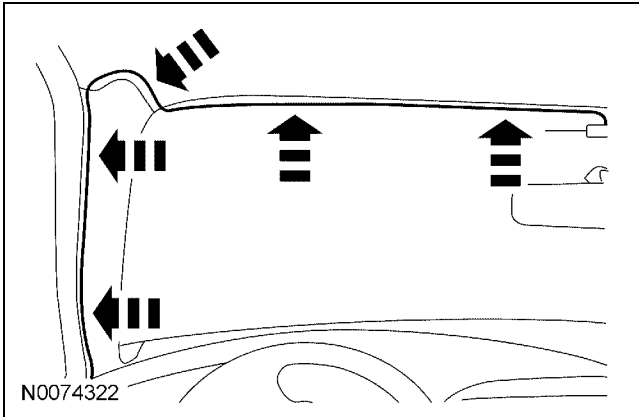
NOTE: The wire will be attached to the control module later in this procedure.

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

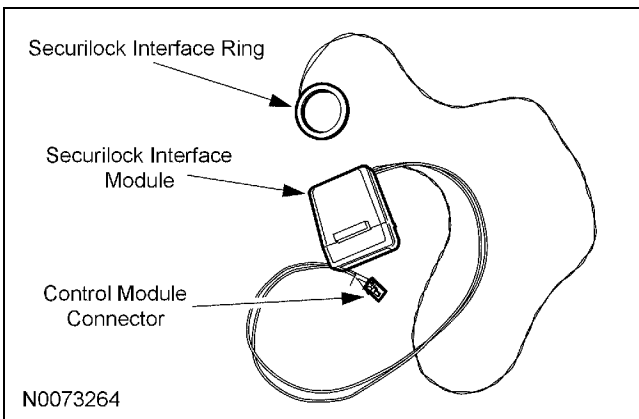


INSTALLATION (Continued)

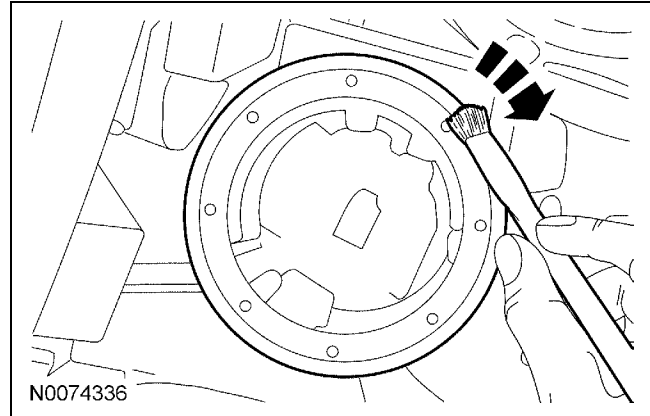
18. Route the dipole antenna cable along the headliner and down the A pillar toward the floor. The wire can be tucked behind the headliner without removing or loosening any of the trim panels.

**Install The Securilock Interface Kit**

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



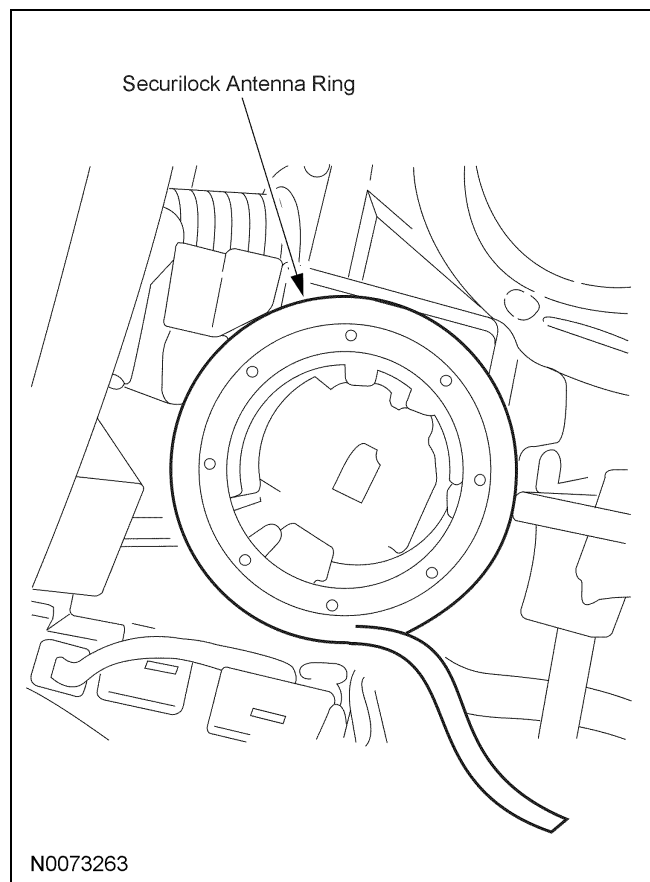
20. Following the directions on the supplied tube of adhesive primer, apply a thin coating around the transceiver antenna coil and allow to dry for approximately 5 minutes.



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

A damaged transceiver ring will result in an inoperable control system.

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



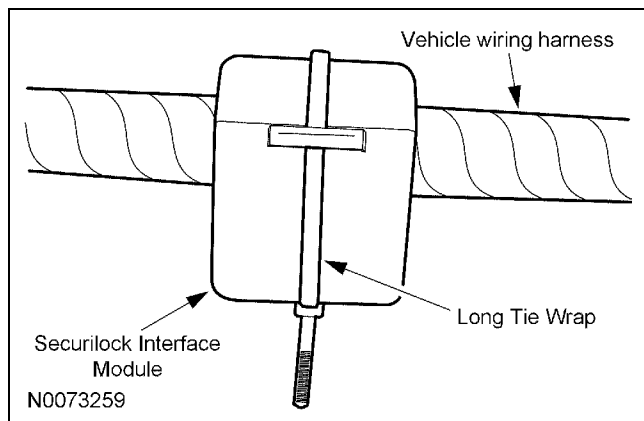
INSTALLATION (Continued)**Install The Securilock Interface Module**

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

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

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

Route the harness and connector to the module mounting location.

**Install the control Module and Harness Assembly**

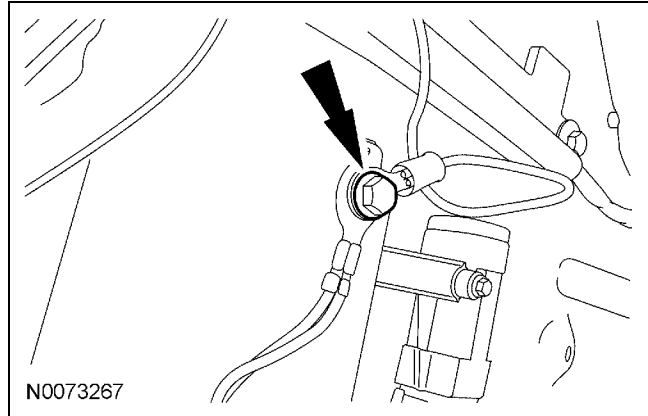
24. Place the control module and harness assembly in the vehicle.

Identify Circuit Wires For Connections

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

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

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



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

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

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

27. Connect the Pink wire from the control module harness to the White/Orange ignition circuit wire at the ignition switch harness.
28. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the Ignition Switch is in the ACC and RUN positions.
- A logic probe will show ground on the correct wire, then show power when the Ignition Switch is in the ACC and RUN positions.
- Identify the Violet/Green heater circuit wire at the ignition switch harness.
29. Connect the Orange wire from the control module harness to the Violet/Green heater circuit wire at the ignition switch harness.
30. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the Ignition Switch is in the RUN position.
- A logic probe will show ground on the correct wire, then show power when the Ignition Switch is in the RUN position.
- Identify the Brown/Yellow heater 2 circuit wire at the ignition switch harness.

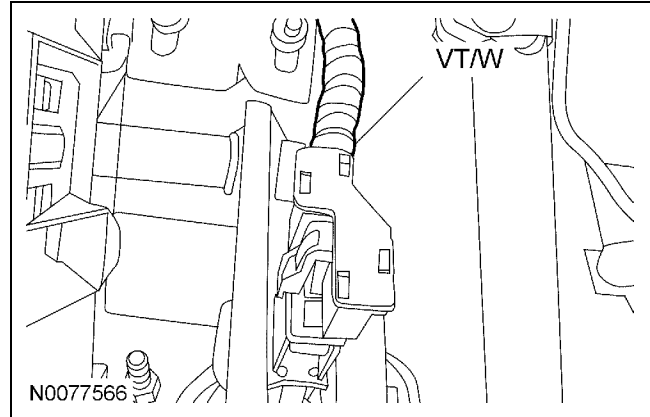
INSTALLATION (Continued)

31. Connect the Orange/White wire from the control module harness to the Brown/Yellow heater 2 circuit wire at the ignition switch harness.
32. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the Ignition Switch is in the START position.
A logic probe will show ground on the correct wire, then show power when the Ignition Switch is in the START position.
Identify the Blue/White starter circuit wire at the ignition switch harness.
33. Cut the Blue/White starter circuit wire at the ignition switch harness.
34. Connect the Violet wire from the control module harness to the harness Blue/White starter circuit wire coming from ignition switch harness.
35. Connect the Violet/Red wire from the control module harness to the Blue/White starter circuit wire coming from ignition switch connector.
36. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the key is in the ignition lock cylinder.
A logic probe will show ground on the correct wire, then show power when the key is in the ignition lock cylinder.
Identify the Blue/Gray Key-in-sense circuit wire at the ignition switch harness.
37. Connect the Black/White wire from the control module harness to the Blue/Gray Key-in-sense circuit wire at the ignition switch harness.
38. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the horn button is held.
A logic probe will show power on the correct wire, then show ground when the horn button is held.
Identify the Yellow/Red horn circuit wire in the steering column harness.
39. Connect the Brown/Black wire from the control module harness to the Yellow/Red horn circuit wire in the steering column harness.

40. **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.



41. Connect the Brown wire from the control module harness to the Violet/White brake switch circuit wire at the brake switch.
42. **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 Blue Cargo High Mounted StopLamp (CHMSL) circuit wire under the driver sill in the harness coming from the passenger side.
43. Connect the Green/Violet wire from the remote start module harness to the Blue CHMSL circuit wire under the driver sill in the harness coming from the passenger side.

INSTALLATION (Continued)

44. **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.
45. Connect the Blue wire from the control module harness to the Blue/Green power door lock circuit wire at the driver kick panel harness.
46. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the door unlock switch is pressed.
A logic probe will show power on the correct wire, then show ground when the door unlock switch is pressed.
Identify the Yellow/Violet power door unlock circuit wire at the driver kick panel harness.
47. Connect the Green wire from the control module harness to the Yellow/Violet power door unlock circuit wire at the driver kick panel harness.
48. **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 Gray/Brown power door lock motor circuit wire at the driver kick panel harness.
49. Connect the White/Blue wire from the control module harness to the Gray/Brown power door lock motor circuit wire at the driver kick panel harness.
50. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the driver door unlock switch is pressed.
A logic probe will show ground on the correct wire, then show power when the driver door unlock switch is pressed.
Identify the Violet/Grey driver power door unlock motor circuit wire at the driver kick panel harness.
51. Connect the Brown wire from the control module harness to the Violet/Grey power door unlock motor circuit wire at the driver kick panel harness.
52. **NOTE:** A DVOM connected to the correct wire will show 12V with the switch in the ON position and 0V with the switch in the parking lights OFF position.
A logic probe connected to the correct wire will show power with the switch in the ON position and open with the switch in the parking lights OFF position.
Identify the Violet/White parking lights on circuit wire at the driver kick panel.
53. Connect the White wire from the control module harness to the Violet/White parking lights on circuit wire at the driver kick panel.
54. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the door unlock switch is pressed.
A logic probe will show ground on the correct wire, then show power when the door unlock switch is pressed.
Identify the Brown/Green power door unlock motor circuit wire under passenger door sill plate.
55. Connect the Light Green wire from the control module harness to the Brown/Green power door unlock motor circuit wire under passenger door sill plate.
56. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V with headlights ON.
A logic probe will show power on the correct wire, then show ground with headlights ON.
Identify the Yellow/Blue headlight circuit wire at the headlight switch.
57. Connect the Red/White wire from the control module harness to the Violet/White headlight switch circuit wire at the headlight switch.

INSTALLATION (Continued)

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

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

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

59. Connect the Black/White wire from the control module harness to the Green/Blue dome circuit wire at the dimmer switch.

Optional Connections / Features Driver Door Priority Unlock

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

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

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

Identify the Violet/Gray driver power door unlock motor circuit wire at the driver kick panel harness.

61. Cut the Violet/Gray driver door unlock motor circuit wire at the driver kick panel harness.
62. Splice the Tan wire from the control module harness to the cut Violet/Gray driver door unlock motor circuit wire going toward the front of the vehicle.
63. Connect the Tan/Red wire from the control module harness to the cut Violet/Gray driver door unlock motor circuit wire going toward the back of the vehicle.
64. Connect the Brown wire from the control module harness to the cut Violet/Gray driver door unlock motor circuit wire going toward the back of the vehicle.

Install The Hood Safety Switch

65. **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.

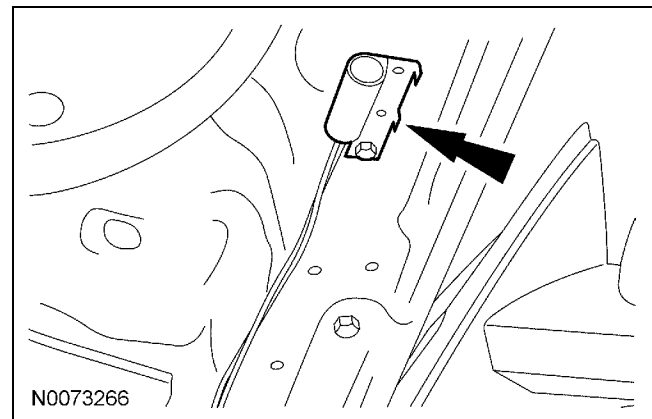
NOTE: The switch should be positioned about 30 degrees below parallel to the ground to accommodate for parking on inclines.

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

- False alarm trips
- Non-control events
- Inadvertent shutdown during control

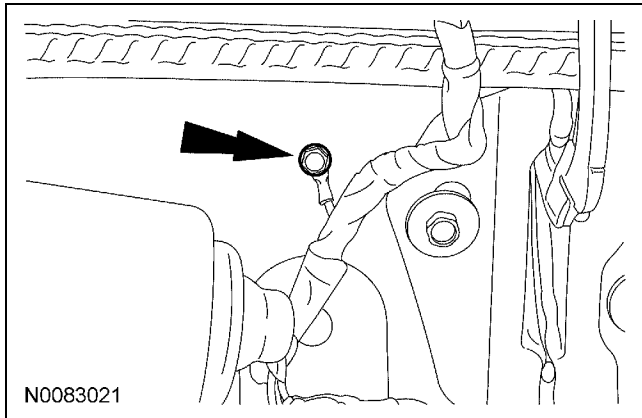
Locate an easy to access area near the driver side hood hinge and install the hood safety switch using the supplied metal screws.

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

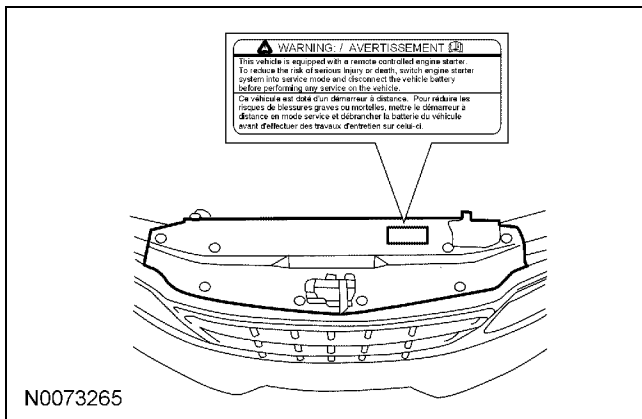


INSTALLATION (Continued)

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



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



69. Route the Gray hood safety switch wire through the bulkhead into the engine compartment and attach to the RKE/VSS/RMST control module.
70. Connect the dipole antenna to the RKE/VSS/RMST control module.
71. Connect the SECURILOCK interface module to the RKE/VSS/RMST control module.

Power Connection

72. **NOTE:** A DVOM connected to the correct wire will show 12V with the key in any position.
A logic probe will show power on the correct wire with the key in any position.
Identify two Blue/Red Battery circuit wire in the ignition switch harness.

73. Connect the one Red wire from the control module harness to the one Blue/Red Battery circuit wire in the ignition switch harness.
74. Connect the remaining Red wire from the control module harness to the remaining Blue/Red Battery circuit wire in the ignition switch harness.

Program The RKE/VSS/RMST System

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

Secure RKE/VSS/RMST Harness and Control Module

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

Install Trim

78. Install the left hand cowl trim panel.
- 1 Install the cowl trim panel.
 - 2 Install the scuff plate.
79. Install the upper and lower steering column shrouds.
Install the 3 screws.
80. Install the tilt lever.
Install the screw.
- Tighten to 6 Nm (53 lb-in).
81. Install the tilt lever dust boot.

INSTALLATION (Continued)

82. Install the lower steering column opening cover.

Install the 3 screws.

GENERAL PROCEDURES

Programming

Programming the Module

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

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

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

NOTE: The remote start override button must be accessible.

Programming Options: Entering Programming Mode

- See chart below for programming information.

Option Bank - 1 Chart (4 - Honks)

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

Option Bank - 2 Chart (5 - Honks)

BANK	OPTIONS	DESCR	LED
2	1	STARTER INTERRUPT	OFF

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

BANK	OPTIONS	DESCR	LED
2	8	DRIVER UNLOCK RELAY	NOTE 2

Option Bank - 3 Chart (6 - Honks)

BANK	OPTIONS	DESCR	LED
3	1	DRIVER PRIORITY UNLOCK	NOTE 2

Option Bank - 4 Chart (7 - Honks)

BANK	OPTIONS	DESCR	LED
4	1	TACHLESS MODE	ON

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

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

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

GENERAL PROCEDURES (Continued)

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

If not please check the following:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GENERAL PROCEDURES (Continued)

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

NOTE: The remote start module is now programmed.


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

Programming the SECURILOCK

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

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

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

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

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

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

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

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

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

25. 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

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)

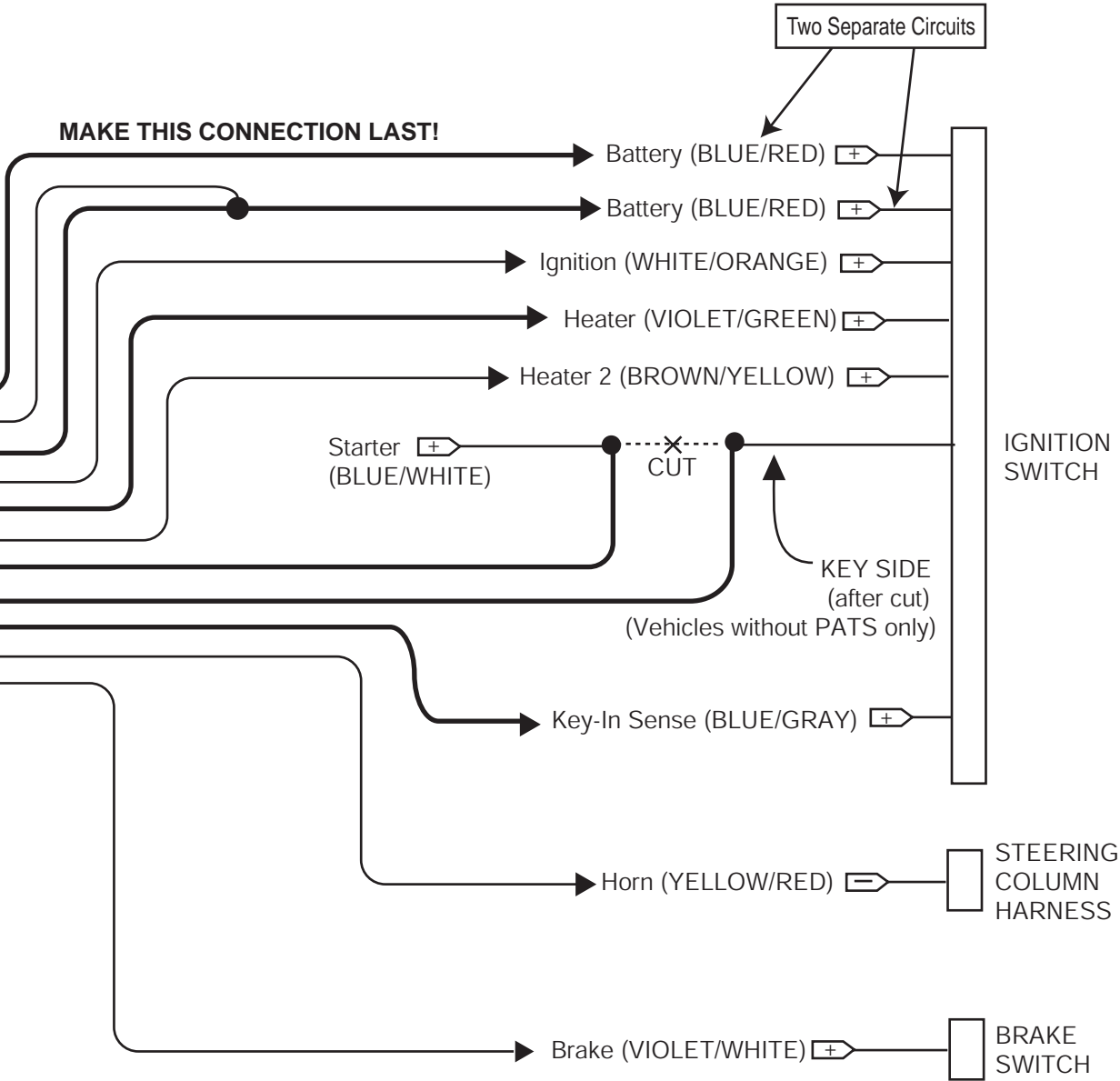
CHIRPS	PROBLEM
5 Chirps	The KEY is in the ignition.
6 Chirps	The remote start system is in SERVICE/VALET mode.

'08 Super Duty

RKE/VSS/RMST MODULE WIRE HARNESS

STEERING COLUMN HARNESS

	Color	Function
A-4	RED	Battery
B-1	BLUE	HVAC2 Feed
B-2	RED	HVAC 1 Battery Feed
A-7	PINK	Ignition 1 Input/Output
B-4	ORANGE	HVAC 1 Output
B-5	ORANGE/WHITE	HVAC 2 Output
A-8	VIOLET	Starter Output
A-6	VIOLET/RED	Starter Interrupt (Key side)
B-8	BLACK/WHITE	Key-in-sense Input
A-21	BROWN/BLACK	Horn Relay Output
B-7	BROWN	Brake Input



'08 Super Duty

MAKE THIS CONNECTION FIRST!

CHASSIS GROUND POINT
IN DRIVERS KICK PANEL

RKE/VSS/RMST MODULE WIRE HARNESS

DRIVERS SIDE KICK PANEL HARNESS

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

Cargo High Mounted Stoplamp (BLUE) +

UNDER DRIVER'S SILL
IN HARNESS COMING
FROM PASSENGER
SIDE

Door Lock (BLUE/GREEN) -

DRIVERS SIDE
KICK PANEL

Door Unlock (YELLOW/VIOLET) -

Lock Motor (GRAY/BROWN) +

Driver Door Unlock Motor
(VIOLET/GRAY) +

Parking Lights On (VIOLET/WHITE) +

UNDER
PASSENGER
DOOR SILL
PLATE

Unlock All Motor Wire (BROWN/GREEN) +

Headlight Output (YELLOW/BLUE) -

HEADLIGHT
SWITCH

Dome (GREEN/BLUE) -

DIMMER
SWITCH

UNDER HOOD HARNESS

	Color	Function
A-19	GRAY	Hood Open Switch Input

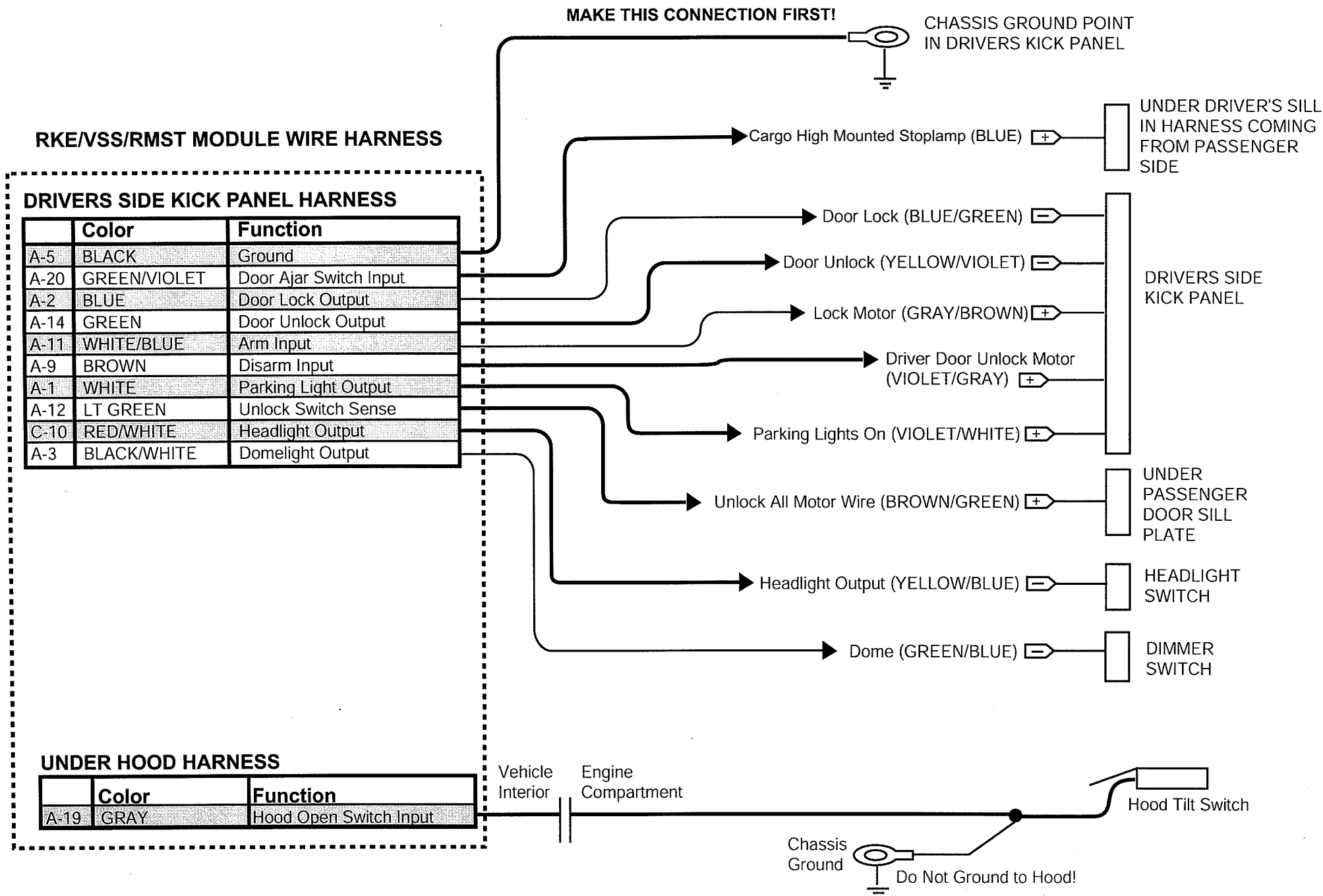
Vehicle
Interior

Engine
Compartment

Hood Tilt Switch

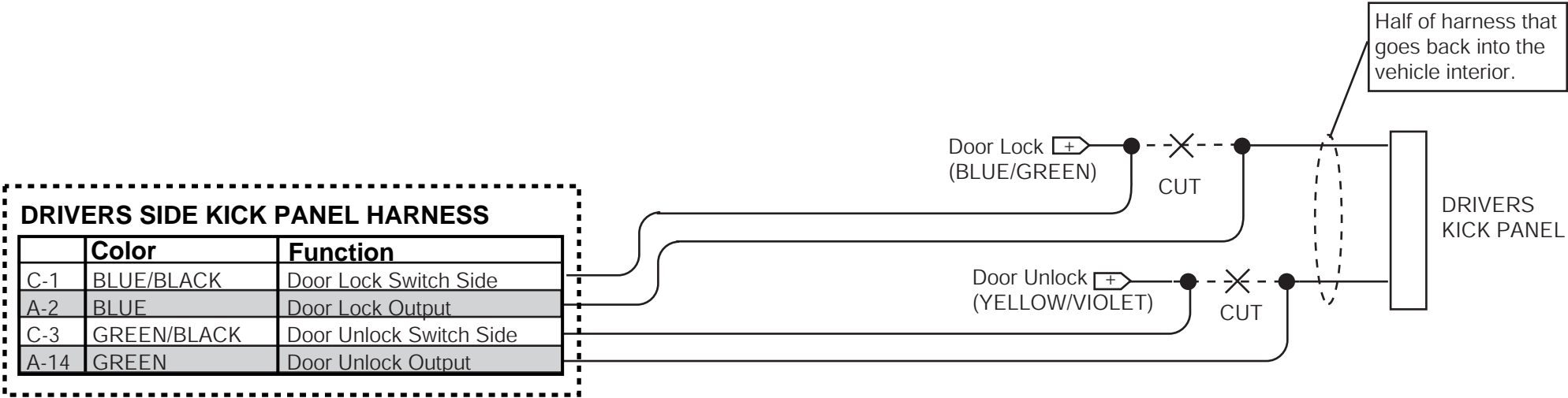
Chassis
Ground

Do Not Ground to Hood!



'08 Super Duty

* MAKE THESE CONNECTIONS ON VEHICLES W/O FACTORY RKE.



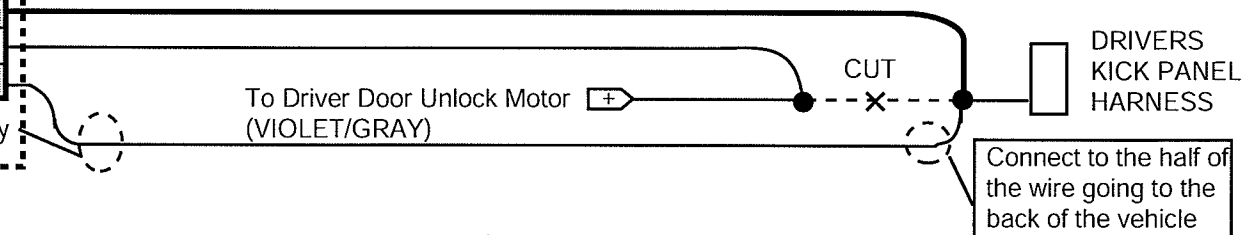
OPTIONAL CONNECTIONS / FEATURES

RKE/VSS/RMST MODULE WIRE HARNESS

	Color	Function
C-9	TAN/RED	Driver Door Unlock Switch
A-13	TAN	Driver Door Unlock Motor
A-9	BROWN	Disarm Input

w/Factory RKE only

BANK	OPTION	DESCRIPTION	LED
2	8	DRIVER UNLOCK RELAY	ON
3	1	DRIVER PRIORITY UNLOCK	ON



[Manual Table of Contents](#)

RKE/VSS/REMOTE START SYSTEM INSTALLATION

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INSTALLATION

[RKE/VSS/Remote Start](#)

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[Functional Test](#)

[Shock Sensor Setting](#)

[Troubleshooting](#)

WIRING DIAGRAMS

[Vehicle Specific Wiring Diagrams](#)

INSTALLATION

Remote Start

Ranger

NOTICE: Remote start systems are only applicable to vehicles with automatic transmissions.

NOTE: Both original keys are required for all remote start systems on vehicles equipped with SECURILOCK.

1. Verify correct kit number.

Review RKE/VSS/RMST Installation Kit Contents

NOTE: Use kit number 7L3Z-19G364-AA REMOTE START SYSTEM

NOTE: Kits are vehicle specific and are not interchangeable.

2. Review the RKE/VSS/RMST kit contents.

Remote Keyless Entry/ Vehicle Security System/ReMoTe STart (RKE/VSS/RMST) System Kit

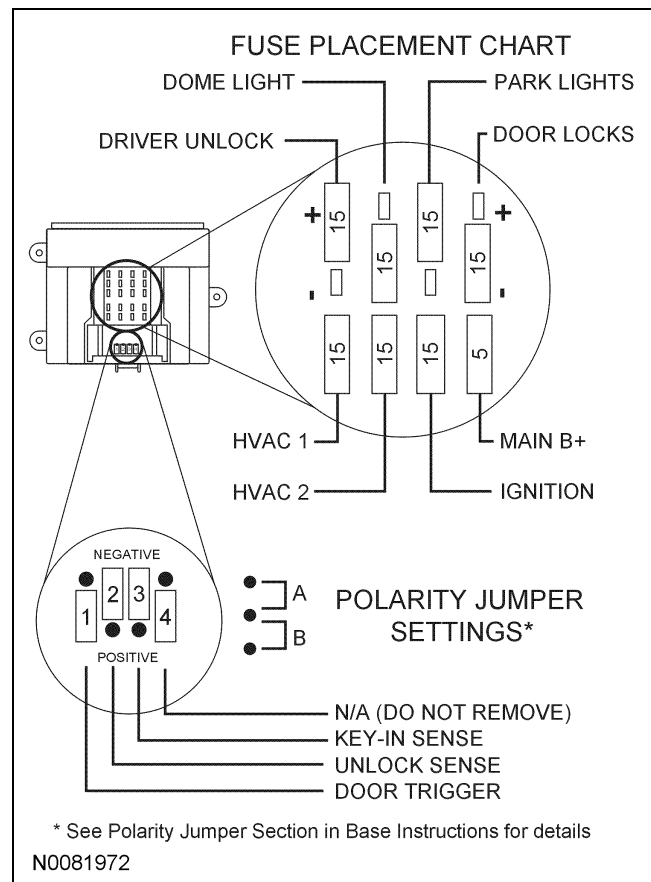
QUANTITY	DESCRIPTION
1	MODULE ASSEMBLY
1	RKE/VSS/RMST SOFTWARE CARTRIDGE ASSEMBLY
2	6 BUTTON POWERCODE TRANSMITTER
3	WIRING HARNESS ASSEMBLIES
1	DIPOLE ANTENNA
1	HOOD SAFETY SWITCH ASSEMBLY
1	INSTALLATION PARTS BAG
1	FUSE PARTS BAG
1	OPERATORS INSTRUCTIONS

Remote Keyless Entry/ Vehicle Security System/ReMoTe STart (RKE/VSS/RMST) System Kit (Continued)

QUANTITY	DESCRIPTION
1	OPERATORS QUICK REFERENCE WALLET CARD
1	UNDERHOOD WARNING LABEL
1	SECURILOCK INTERFACE KIT (SOLD SEPARATELY AND REQUIRED FOR VEHICLES W/PATS)

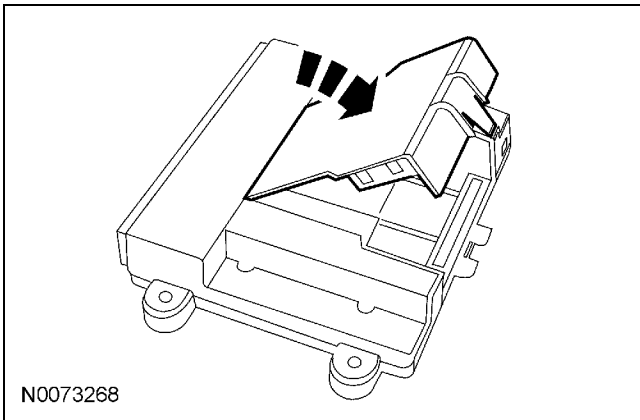
Module Preparation

3. Place the supplied fuses into the power distribution block on the RKE/VSS/RMST control module.
 - Move the polarity jumpers to their proper locations on the control module, see illustration.

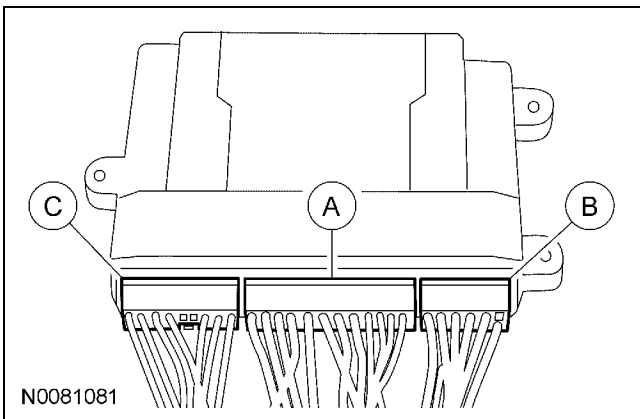


INSTALLATION (Continued)

4. Place the software cartridge onto the RKE/VSS/RMST control module.



5. Plug the wiring harness(es) into the module.
- A - Harness: 24-way, used on all systems.
 - B - Harness: 10-way, used on all systems with RKE/VSS/RMST.
 - C - Harness: 16-way, used on all systems with RKE/VSS/RMST.



6. **NOTE:** Do not cut the override programming button off of the harness, it is used for all installations.

NOTE: For vehicle specific wiring diagram(s) [click here](#).

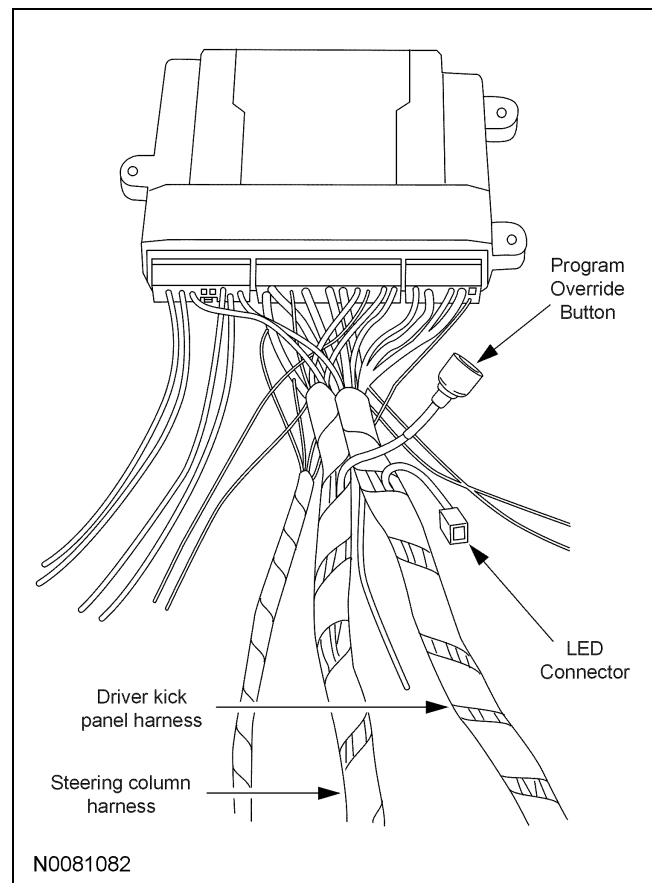
NOTE: Vehicle w/o factory RKE skip this step.

Splice the following wire to the A-14 Green wire in the A connector of the control module approximately 8 inches from the connector

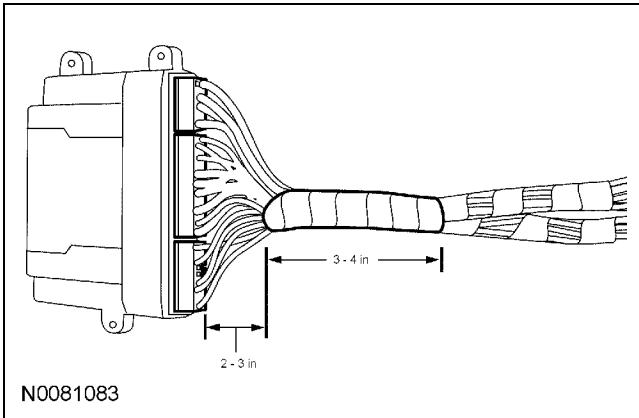
- A-12 Light Green wire in the A connector.

7. Referring to the vehicle specific wiring section for the system being installed, gather all individual wires that will be routed to the same areas of the vehicle into groups. Cover each wire group with electrical tape for approximately 18". Depending on the vehicle, there will be 2 to 5 different wire groups.

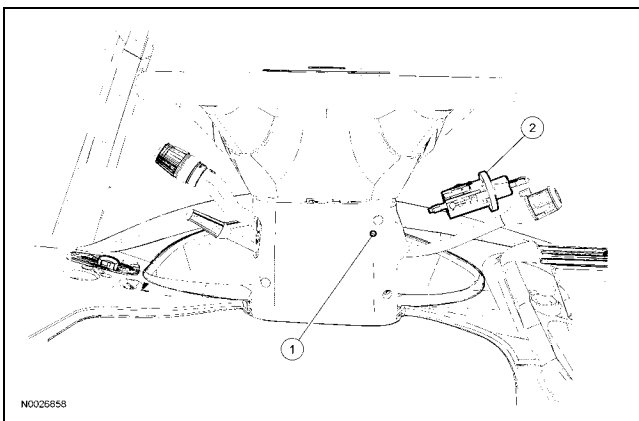
Trim the unused wires approximately 6 - 8" from the module.



8. Tape the harness sections together, making sure to cover all of the unused wires.

INSTALLATION (Continued)**Vehicle Preparation**

9. Remove the 2 bolts and position the hood latch release handle aside.
10. Remove the screws and the lower instrument panel steering column cover.
11. Remove the 5 instrument panel steering column opening cover reinforcement bolts and the reinforcement panel.
12. Insert the ignition key and turn to the RUN position.
13. Press the ignition lock cylinder release pin and remove the ignition lock cylinder.



14. Remove the steering column shroud.
 - Remove the tilt shank.
 - Remove the shroud.

15. Remove the left hand scuff plate and cowl trim panel.

Dipole Antenna Mounting

NOTE: For good range of operation, the dipole antenna must be installed correctly.

NOTE: Keep these points in mind when selecting a location and mounting the dipole antenna.

- Do not mount the antenna behind or on any metal film or window tinting on the windshield.
- Do not mount the antenna so that one of the antenna elements touches or crosses any vehicle wiring and/or metal.
- On vehicles without metal film in the windshield around the rear view mirror, mount the antenna between the headliner and the rear view mirror.
- On vehicles equipped with an electronic mirror, or on vehicles with metal film around the rearview mirror, mount the antenna approximately 3 inches below the mirror attachment point to the windshield and/or mirror electronics.

16. Choose a suitable mounting location following the guidelines above.

Install The Dipole Antenna

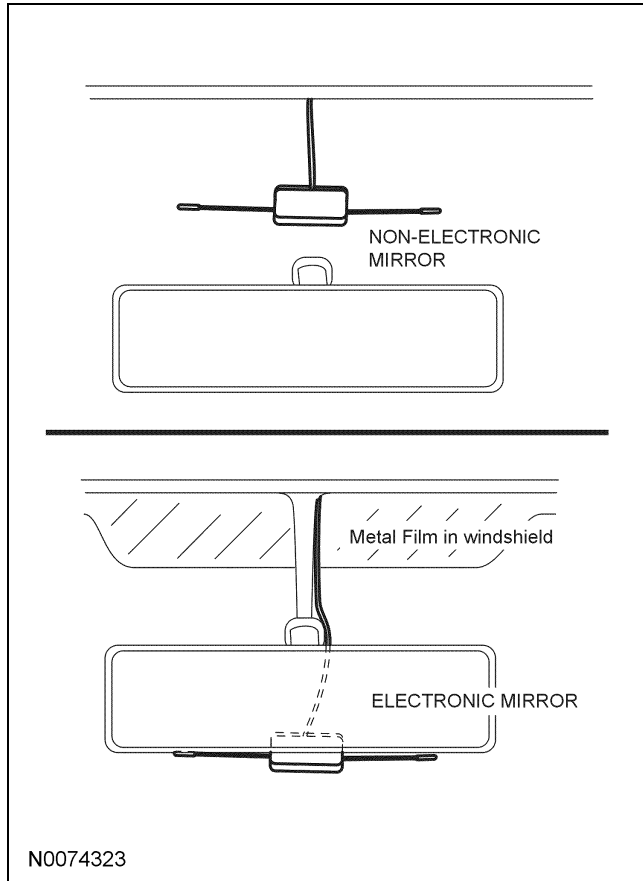
17. Clean the mounting surface using an alcohol base solution and a clean cloth.

18. **NOTE:** Do not touch the adhesive, reduced adhesion may result.

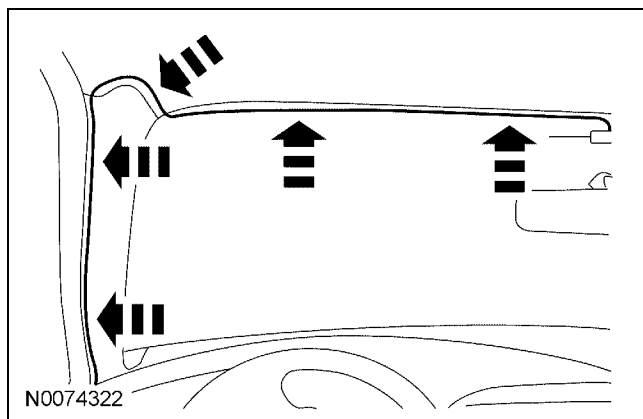
NOTE: Make sure that the long wire on the antenna is pointing toward the top of the windshield since this wire will be routed along the headliner.

NOTE: The wire will be attached to the control module later in this procedure.

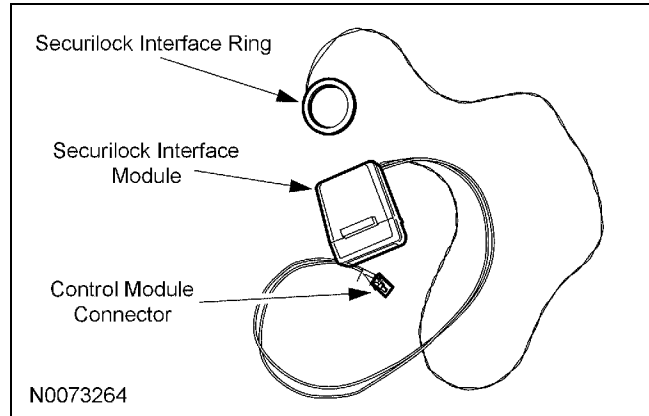
Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the windshield.

INSTALLATION (Continued)

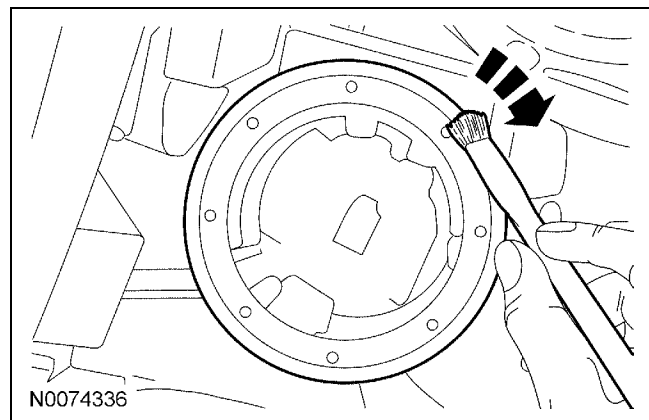
19. Route the dipole antenna cable along the headliner and down the A pillar toward the floor. The wire can be tucked behind the headliner without removing or loosening any of the trim panels.

**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.



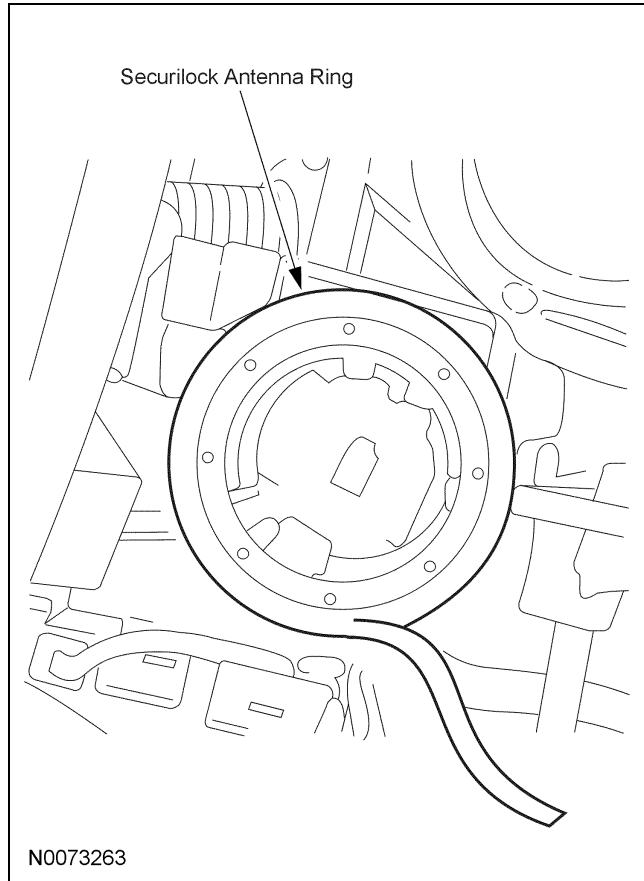
21. Following the directions on the supplied tube of adhesive primer, apply a thin coating around the transceiver antenna coil and allow to dry for approximately 5 minutes.



22. **NOTICE:** Do not damage the transceiver ring during installation or while installing the steering column shrouds.

A damaged transceiver ring will result in an inoperable remote start system.

Remove the protective backing from the SECURILOCK antenna ring. Place the SECURILOCK ring over the PATS transceiver and press firmly in place.

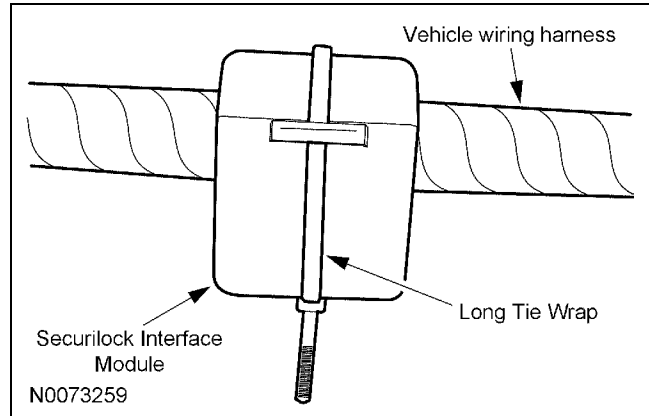
INSTALLATION (Continued)**Install The Securilock Interface Module**

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**

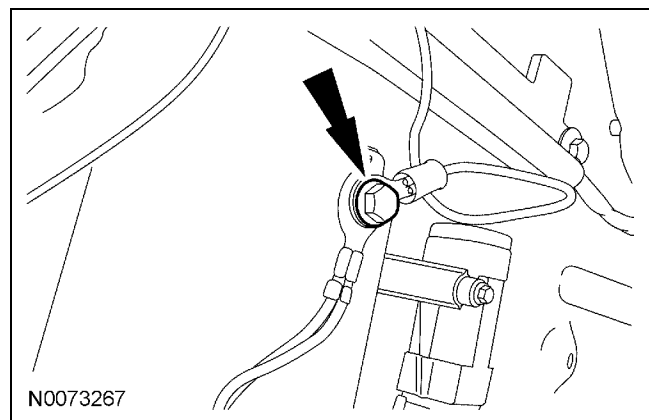
25. Install the ignition lock cylinder.
26. Place the remote start module and harness assembly in the vehicle.

Identify Circuit Wires For Connections

NOTE: For vehicle specific wiring diagram(s) [click here](#).

NOTE: For proper wire splicing techniques [click here](#).

27. Connect the black ground wire from the remote start module harness to the chassis ground point in the driver kick panel.



INSTALLATION (Continued)

28. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the Ignition Switch is in the RUN/START position.

A logic probe will show ground on the correct wire, then show power when the ignition switch is in the RUN/START position.

Identify the White/Orange ignition circuit wire at the Ignition Switch.

29. Connect the Pink wire from the control module harness to the White/Orange ignition circuit wire at the Ignition Switch.

30. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the Ignition Switch is in the RUN position.

A logic probe will show ground on the correct wire, then show power when the Ignition Switch is in the RUN position.

Identify the Brown/Yellow heater circuit wire at the Ignition Switch.

31. Connect the Orange wire from the control module harness to the Brown/Yellow heater circuit wire at the Ignition Switch.

32. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the Ignition Switch is in the RUN/ACC position.

A logic probe will show ground on the correct wire, then show power when the Ignition Switch is in the RUN/ACC position.

Identify the Violet/Green heater circuit wire at the Ignition Switch.

33. Connect the Orange/White wire from the control module harness to the Violet/Green heater circuit wire at the Ignition Switch.

Vehicles W/O Pats

34. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the Ignition Switch is in the START position.

A logic probe will show ground on the correct wire, then show power when the Ignition Switch is in the START position.

Identify the Blue/White starter circuit wire at the Ignition Switch.

35. Cut the Blue/White starter circuit wire at the Ignition Switch.

36. Connect the Violet wire from the control module harness to the harness Blue/White starter circuit wire coming from the ignition switch harness.

37. Connect the Violet/Red wire from the control module harness to the Blue/White starter circuit wire coming from the ignition switch connector.

All Vehicles

38. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the Ignition Switch is in the START position.

A logic probe will show ground on the correct wire, then show power when the Ignition Switch is in the START position.

Identify the Blue/White starter circuit wire at the Ignition Switch.

39. Connect the Violet wire from the control module harness to the harness Blue/White starter circuit wire at the ignition switch.

40. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the horn button is held.

A logic probe will show open on the correct wire, then show ground when the horn button is held.

Identify the Yellow/Red horn circuit wire located in the 10-way connector to right of the steering column.

41. Connect the Brown/Black wire from the control module harness to the Yellow/Red horn circuit wire located in the 10-way connector to right of the steering column.

42. **NOTE:** A DVOM connected to the correct wire will show 12V when the key is removed, then 0V when the key is in the lock cylinder.

A logic probe will show power on the correct wire, then show ground when the key is inserted into the lock cylinder.

Identify the Blue/Grey key in sense circuit wire located in the 10-way connector to right of the steering column.

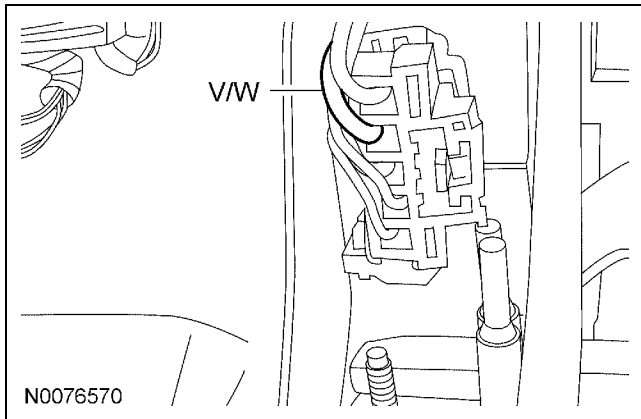
INSTALLATION (Continued)

43. Connect the Black/White wire from the control module harness to the Blue/Gray key in sense circuit wire located in the 10-way connector to right of the steering column.

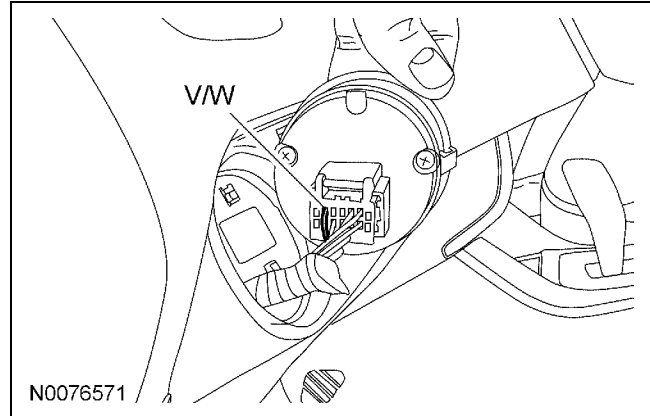
44. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V while depressing the brake pedal.

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.



45. Connect the Brown wire from the control module harness to the Violet/White brake switch circuit wire at the brake switch.
46. **NOTE:** A DVOM connected to the correct wire will show 0V with the switch in the OFF position, then show 12V with the switch in the parking lamps ON position.
- A logic probe connected to the correct wire will show ground with the switch in the OFF position, then power with the switch in the parking lamps ON position.
47. Identify the Violet/White parking light circuit wire at the headlight switch.



48. Connect the White wire from the control module harness to the Violet/White parking light circuit wire at the headlight switch.
49. **NOTE:** A DVOM connected to the correct wire will show 12V with the switch in the OFF position, then show 0V with the dimmer switch in the dome lamp ON position.
- A logic probe connected to the correct wire will show open with the switch in the OFF position, then ground with the dimmer switch in the dome lamp ON position.
- Identify the White/Brown dome light output circuit wire at the dimmer switch. location.
50. Connect the Black/White wire from the control module harness to the White/Brown dome light output circuit wire at the dimmer switch.
51. **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:** A DVOM connected to the correct wire will show 12V with the doors open and the dome lamps on, then show 0V with the doors closed and the dome lamps off.
- A logic probe will show power on the correct wire, then show ground when the doors are closed and the dome lamps off.
- Identify the Green/Blue door ajar switch circuit wire in the harness to the right of the accelerator pedal.

INSTALLATION (Continued)

52. Connect the Green/Violet wire from the remote start module harness to the Green/Blue door ajar switch circuit wire in the harness to the right of the accelerator pedal.
53. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the door lock switch is pressed.
A logic probe will show open on the correct wire, then show ground when the door lock switch is pressed.
Identify the Gray/Yellow power door lock circuit wire at the driver door jamb boot.
54. Connect the Blue wire from the remote start module harness to the Gray/Yellow power door lock circuit at the driver door jamb boot harness.
55. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the door unlock switch is pressed.
A logic probe will show open on the correct wire, then show ground when the door unlock switch is pressed.
Identify the Violet/Gray power door unlock circuit wire at the driver door jamb boot harness.
56. Connect the Green wire from the control module harness to the Violet/Gray power door unlock motor circuit wire at the driver door jamb boot harness.
57. Connect the Light Green wire from the control module harness to the Violet/Gray power door unlock motor circuit wire at the driver door jamb boot harness.
58. **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 Gray/Brown power door lock motor circuit wire at the driver door jamb boot harness.
59. Connect the White/Blue wire from the control module harness to the Gray/Brown power door lock motor circuit wire at the driver door jamb boot harness.
60. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the door unlock switch is pressed.
A logic probe will show ground on the correct wire, then show power when the door unlock switch is pressed.
Identify the Blue/Green power door unlock motor circuit wire at the driver door jamb boot harness.
61. Connect the Brown wire from the control module harness to the Blue/Green power door unlock motor circuit wire at the driver door jamb boot harness.
- All Vehicles**
62. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the driver door is OPEN.
A logic probe will show open on the correct wire, then show ground when the driver door is OPEN.
Identify the Green/Violet door ajar circuit wire at the driver door jamb boot harness.
63. Connect the Light Green/Black wire from the control module harness to the Green/Violet door ajar circuit wire at the driver door jamb boot harness.
- Install The Power Window, Slider and Moonroof Interrupt Relays**

Vehicles With Factory RKE

64. Prepare the relay harnesses.

INSTALLATION (Continued)**Vehicles With Power Windows**

NOTE: Two relays and two harnesses are required.

NOTE: Vehicles with manual windows, skip this section and continue to hood safety switch installation.

65. Remove circuit 87 yellow wires and terminals from the relay harness connectors.
 - Release the locking tab and pull the wire and terminal from the connector.
66. Connect the circuit 85 White wires from the power window, interrupt relays to the Blue/Black circuit wire from the remote start module harness.
67. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the Ignition Switch is in the RUN/START position. A logic probe will show ground on the correct wire, then show power when the Ignition Switch is in the RUN/START position. Identify the White/Orange ignition circuit wire at the Ignition Switch.
68. Connect the circuit 86 Black wires from the power window, interrupt relays to the White/Orange battery wire at the ignition switch harness.
69. **NOTE:** Relay one is for the driver power window. Identify the Gray/Yellow driver power window 12V supply circuit wire at the driver kick panel.
70. Cut the Gray/Yellow driver power window 12V supply circuit wire at the driver kick panel.
 - Connect the circuit 30 Blue wire from the power window, slider and moonroof interrupt relay one to the feed side of the Gray/Yellow driver power window 12V supply circuit wire at the driver kick panel.
 - Connect the circuit 87a Red wire from the power window, slider and moonroof interrupt relay one to the load side of the Gray/Yellow driver power window 12V supply circuit wire at the driver kick panel.

71. **NOTE:** Relay two is for the passenger power window.

Identify the Violet/White passenger power window 12V supply circuit wire at the passenger kick panel.

72. Cut the Violet/White passenger power window 12V supply circuit wire at the passenger kick panel.
 - Connect the circuit 30 Blue wire from the power window, slider and moonroof interrupt relay two to the feed side of the Violet/White passenger power window 12V supply circuit wire at the passenger kick panel.
 - Connect the circuit 87a Red wire from the power window, slider and moonroof interrupt relay two to the load side of the Violet/White passenger power window 12V supply circuit wire at the passenger kick panel.

All Vehicles, Install The Hood Safety Switch

73. **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.

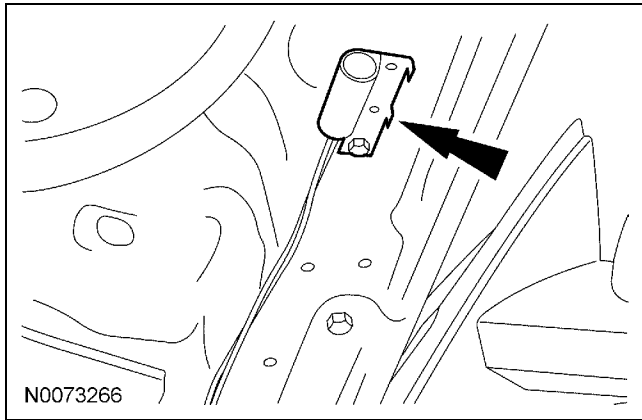
Failure to position the switch properly could result in one of the following:

- False alarm trips
- Non-Remote Start events
- Inadvertent shutdown during Remote Start

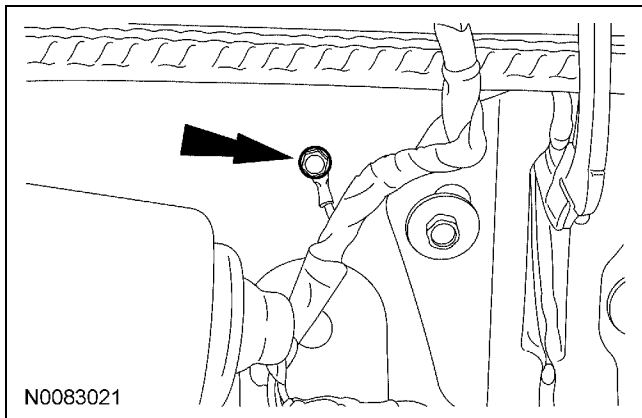
Locate an easy to access area near the drivers side hood hinge and install the hood safety switch using the supplied metal screws.

INSTALLATION (Continued)

74. Apply rustproofing compound (PM-12-A) to the drilled hole and torque the screw to 1.00 Nm (10 lb-in).

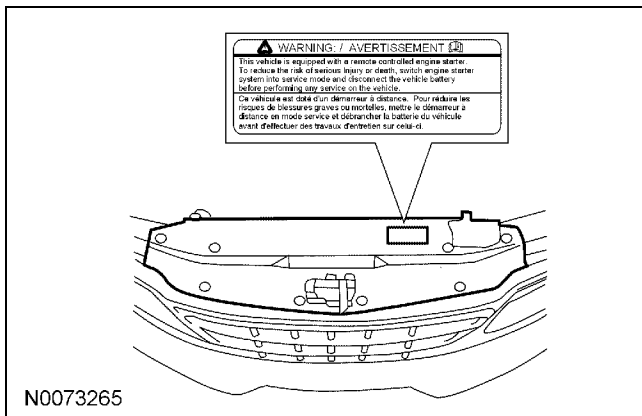


75. Connect hood switch ground wire to a suitable location on the bulkhead.



76. **NOTE:** Place the label on the radiator fan shroud or similar area.

Install the underhood warning label



77. Route the Grey hood safety switch wire from the RKE/VSS/RMST control module through the bulkhead into the engine compartment and attach to the hood safety switch.

78. Connect the dipole antenna to the RKE/VSS/RMST control module.

79. Connect the SECURILOCK interface module to the RKE/VSS/RMST control module.

Optional Connections/Features - Driver Door Priority Unlock

NOTE: Refer to vehicle specific wiring diagram(s) [click here](#).

80. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the driver door unlock switch is pressed.

A logic probe will show ground on the correct wire, then show power when the driver door unlock switch is pressed.

Identify the Blue/Green driver power door unlock motor circuit wire at the driver door jamb boot harness.

81. Cut the Blue/Green driver power door unlock motor circuit wire at the driver door jamb boot harness.
82. Splice the Tan wire from the control module harness to the cut Blue/Green driver door unlock motor circuit wire going toward the front of the vehicle.
83. Connect the Tan/Red wire from the control module harness to the cut Blue/Green driver door unlock motor circuit wire going toward the back of the vehicle.
84. **NOTE:** With factory RKE only
- Connect the Brown wire from the control module harness to the cut Blue/Green driver door unlock motor circuit wire going toward the back of the vehicle.

INSTALLATION (Continued)

Power Connection

85. **NOTE:** A DVOM connected to the correct wire will show 12V with the key in any position. A logic probe will show power on the correct wire with the key in any position. Identify three Red Battery circuit wires at the ignition switch.

86. Connect one of the three Red wires from the control module harness to one of the three Red Battery circuit wires at the ignition switch.
87. Connect one of the remaining Red wires from the control module harness to one of the remaining Red Battery circuit wires at the ignition switch.
88. Connect the remaining Blue wire from the control module harness to the remaining Red Battery circuit wire at the ignition switch harness.

Program The RKE/VSS/RMST System

89. [Refer to the RKE/VSS/RMST programming section for this vehicle \(click here\).](#)

Secure RKE/VSS/RMST Harness and Control Module

90. Use the supplied tie wraps to secure the RKE/VSS/RMST harness wires.

91. **NOTE:** Do not mount the control module in the knee bolster area.

To ensure the best performance of the built-in shock sensor, secure the control module at three points to the vehicle.

Use the supplied long tie wraps to mount the RKE/VSS/RMST control module to the underdash wiring harness.

Install Trim

92. Install the steering column shroud.
93. Install the reinforcement panel and install the 3 instrument panel steering column opening cover reinforcement bolts.
- Tighten to 7 Nm (62 lb-in).
94. Install the lower instrument panel steering column cover and the screws.
95. Position back the hood latch release handle and install the 2 bolts.
- Tighten to 7 Nm (62 lb-in).
96. Install the left hand scuff plate and cowl trim panel.

GENERAL PROCEDURES

Programming

Programming the Module

- NOTE:** If the control module options (Key-in sense polarity, door ajar polarity, or tach mode) are not programmed correctly, vehicle will not remote start or operate properly.

NOTE: Make sure that the hood is closed before proceeding.

NOTE: The LED on the remote start harness must be visible to complete module programming.

NOTE: The remote start override button must be accessible.

Programming Options: Entering Programming Mode

NOTE: The horn will not honk until option 7 of bank 1 is programmed.

- See chart below for programming information.

Option Bank 1 Chart (4 Honks)

BANK	OPTIONS	DESCR	LED
1	1	LITE TOUCH ADJUST	NOTE 1
1	2	FULL SHOCK ADJUST	NOTE 1
1	4	DOOR AJAR INVERT	ON
1	5	UNLOCK SENSE INVERT	ON
1	6	KEY-IN SENSE INVERT	ON
1	7	EXTENDED HORN HONK	ON

Option Bank 2 Chart (5 Honks)

BANK	OPTIONS	DESCR	LED
2	1	STARTER INTERRUPT	OFF
2	8	DRIVER UNLOCK RELAY	NOTE 2

Option Bank 3 Chart (6 Honks)

BANK	OPTIONS	DESCR	LED
3	1	DRIVER PRIORITY UNLOCK	NOTE 2

Option Bank 4 Chart (7 Honks)

BANK	OPTIONS	DESCR	LED
4	1	TACHLESS MODE	ON

NOTE: 1. Perform proper adjustments following the “Shock Sensor Setting”, refer to General Procedures [click here](#).

NOTE: 2. See the Optional Connections/Features, refer to Vehicle Specific Wiring Diagrams [click here](#).

- Open the driver door.
All other doors should remain closed.
- Turn the ignition key to the RUN position.
- Press and hold the remote start system override button for at least 10 seconds.
After 10 seconds the horn will honk 3 times, indicating the system is now in the learn mode.

GENERAL PROCEDURES (Continued)

6. Press and release the override button. The horn will honk 4 times indicating the system has entered the first program bank.

If not, please check the following:

- Brake pedal switch wire solder connection.
- Hood closed and Grey hood safety switch wire solder connection.
- Dome light circuit wire solder connections.
- The key is in the RUN position.
- The software cartridge is firmly seated in the RMST module.
- The RMST harness connections are firmly seated in the RMST module.

NOTE: If you require additional assistance: CALL 1-800-FORD KEY.

7. Press and release the remote start fob panic button 4 times.

The horn will honk 4 times indicating the system has entered the option 4 of the first program bank.

NOTICE: When turning the LED on or off using the remote start fob button, press and immediately release the remote start button.

8. The LED must be on for option 4. If the LED is illuminated no action is required. If the LED is not illuminated press the remote start fob lock button and verify the LED illuminates.

NOTE: When programming the remote start module, if the remote start fob unlock button is pressed, the horn will chirp 4 times indicating the system returned to the factory default settings. If this occurs, return to step 1 of the programming section to reprogram the remote start module.

9. Press and release the remote start fob panic button.

The horn will honk 5 times indication the system has entered the option 5 of the first program bank.

10. The LED must be on for option 5. If the LED is illuminated no action is required. If the LED is not illuminated press the remote start fob lock button and verify the LED illuminates.

11. Press and release the remote start fob panic button. The horn will honk 6 times indicating the system has entered option 6 of the first program bank.

12. The LED must be ON for option 6. If the LED is illuminated no action is required. If the LED is not illuminated press the remote start fob lock button to verify that the LED illuminates.

13. Press and release the remote start fob panic button.

The horn will honk 7 times indication the system has entered the option 7 of the first program bank.

14. The LED must be on for option 7. If the LED is illuminated no action is required. If the LED is not illuminated press the remote start fob lock button and verify the LED illuminates.

15. Press and release the override button. The horn will honk 5 times indicating the system has entered the second option bank.

16. Press and release the remote start fob panic button.

The horn will honk 1 time indication the system has entered the option 1 of the second program bank.

17. The LED must be OFF for option 1. If the LED is not illuminated no action is required. If the LED is illuminated press the remote start fob lock button and verify the LED does not illuminate.

18. Press and release the override button 2 times. The horn will honk 7 times indicating the system has entered the fourth option bank.

19. Press and release the remote start fob panic button.

The horn will honk 1 time indication the system has entered the option 1 of the fourth program bank.

20. The LED must be ON for option 1. If the LED is illuminated no action is required. If the LED is not illuminated press the remote start fob lock button and verify the LED illuminates.

GENERAL PROCEDURES (Continued)

NOTE: The remote start module is now programmed.

21. **NOTE:** Immediately after programming the remote start module, program the SECURILOCK.

Programming the SECURILOCK

NOTE: Two PATS keys are required to program the SECURILOCK.

NOTE: IMPORTANT: Each of the following steps should be completed with no more than 5 seconds delay between steps.

22. Insert the first ignition key and turn to the run position.

Watch for the PATS light to turn off. Remove the first key.

23. Insert the second ignition key and turn to the run position.

Watch for the PATS light to turn off. Remove the second key.

24. Press and hold the remote start button for 3 seconds.



The PATS light should stay on for 3-5 seconds before turning off, which means that the SECURILOCK was successfully programmed.

NOTE: If the PATS light blinks rapidly, repeat steps 1-3 to retry programming the SECURILOCK.

NOTE: The engine will start if the Remote Start kit has been installed correctly, the brake is not depressed, and the hood and doors are closed.

25. 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

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)

CHIRPS	PROBLEM
5 Chirps	The KEY is in the ignition.
6 Chirps	The remote start system is in SERVICE/VALET mode.

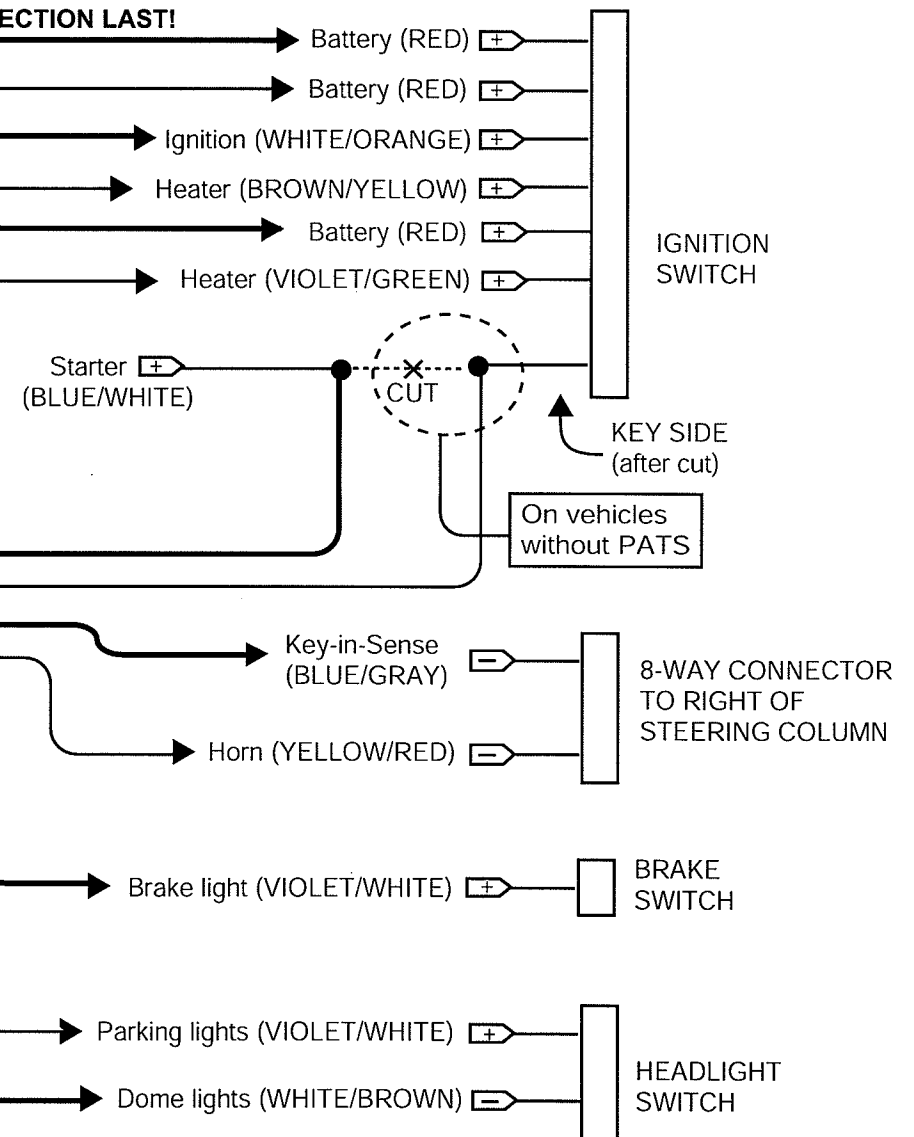
'08 Ranger

RKE/VSS/RMST MODULE WIRE HARNESS

STEERING COLUMN HARNESS

	Color	Function
A-4	RED	Battery
B-2	RED	HVAC 1 Feed
A-7	PINK	Ignition 1 Input/Output
B-4	ORANGE	HVAC 1 Output
B-1	BLUE	HVAC 2 Feed
B-5	ORANGE/WHITE	HVAC 2 Output
A-8	VIOLET	Starter Interrupt (Motor side)
A-6	VIOLET/RED	Starter Interrupt (Key side)
B-8	BLACK/WHITE	Key-in-sense Input
A-21	BROWN/BLACK	Horn Relay Output
B-7	BROWN	Brake Input
A-1	WHITE	Parking Light Output
A-3	BLACK/WHITE	Dome Light Output

MAKE THIS CONNECTION LAST!



'08 Ranger

MAKE THIS CONNECTION FIRST!

CHASSIS GROUND POINT
IN DRIVERS KICK PANEL

RKE/VSS/RMST MODULE WIRE HARNESS

DRIVERS SIDE KICK PANEL HARNESS

	Color	Function
A-5	BLACK	Ground
A-20	GREEN/VIOLET	Door Ajar Switch Input
A-2	BLUE	Door Lock Output
A-14	GREEN	Door Unlock Output
A-12	LT.GREEN	Unlock Switch Sense Input
A-11	WHITE/BLUE	Arm Input
A-9	BROWN	Disarm Input
C-4	LT GREEN/BLACK	Factory Alarm Disarm Output

Dome Light (GREEN/BLUE) +

Door Lock (GRAY/YELLOW) -

Door Unlock (VIOLET/GRAY) -

Lock Motor (GREY/BROWN) +

Driver Door Unlock Motor
(BLUE/GREEN) +

Connect only on vehicles
with factory RKE

Driver Door Ajar Switch
(GREEN/VIOLET) -

HARNESS TO THE
RIGHT OF GAS
PEDAL

DRIVER DOOR
JAMB BOOT
HARNESS

UNDERHOOD HARNESS

	Color	Function
A-19	GRAY	Hood Open Switch Input

Vehicle
Interior

Underhood

Chassis
ground

Do Not Ground to Hood!

HOOD TILT SWITCH

OPTIONAL CONNECTIONS / FEATURES

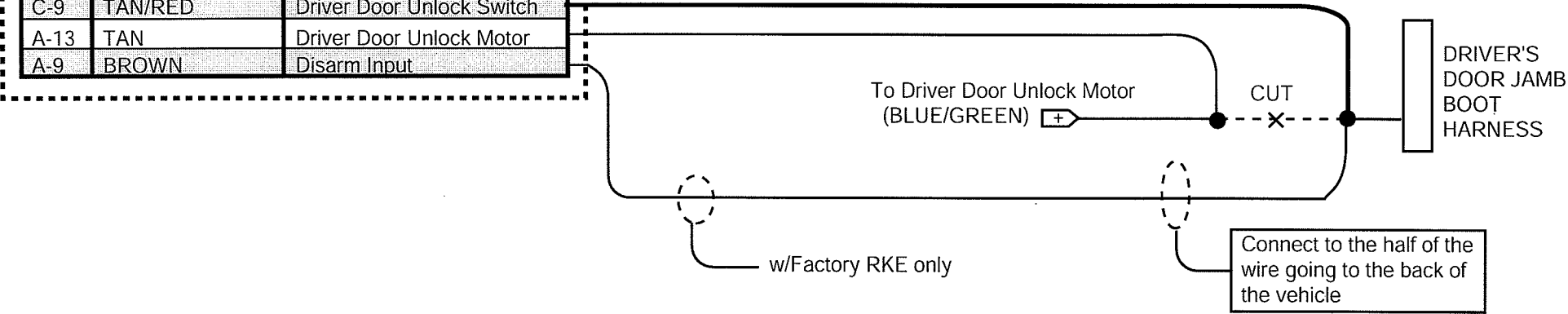
RKE/VSS/RMST MODULE WIRE HARNESS

DRIVER'S DOOR PRIORITY UNLOCK

	Color	Function
C-9	TAN/RED	Driver Door Unlock Switch
A-13	TAN	Driver Door Unlock Motor
A-9	BROWN	Disarm Input

OPTION PROGRAMMING REQUIREMENTS

BANK	OPTION	DESCRIPTION	LED
2	8	DRIVER UNLOCK RELAY	ON
3	1	DRIVER PRIORITY UNLOCK	ON



'08 Ranger

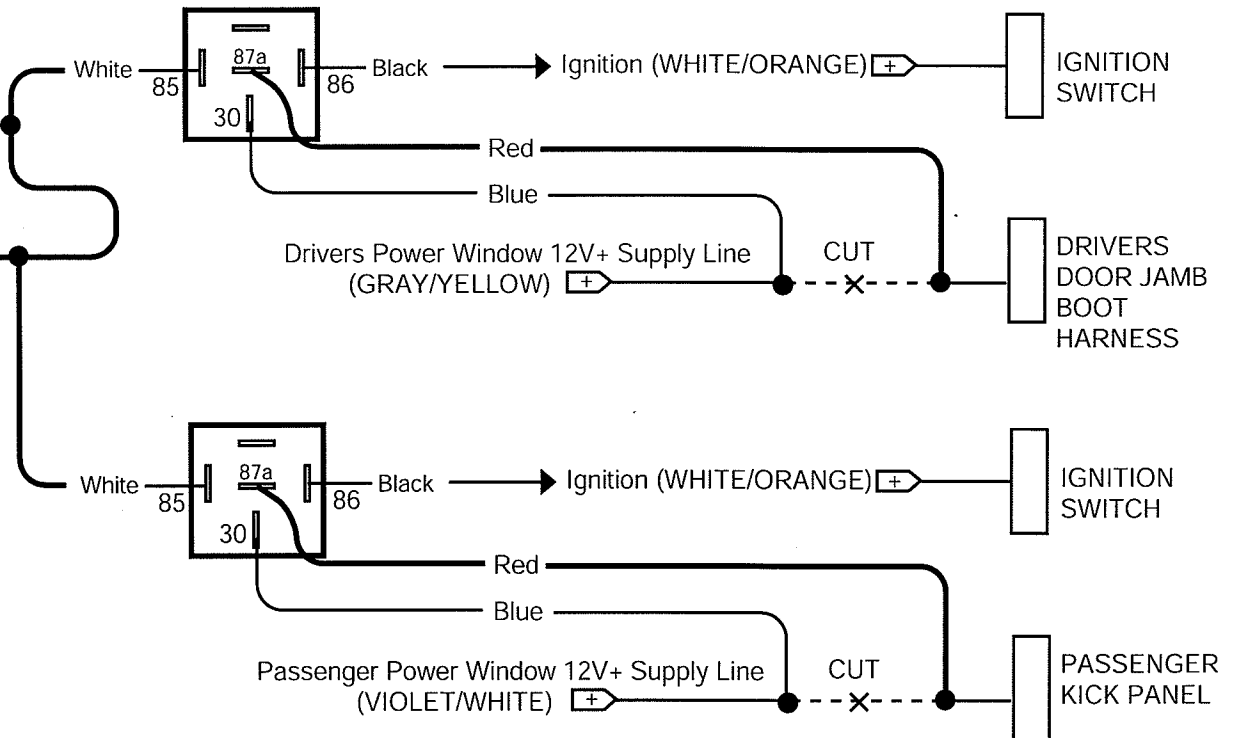
POWER WINDOW, SLIDER & MOONROOF INTERRUPTS

Relays shown are not supplied in kit. Relays are available by ordering Ford part number YL3Z-19G390-AA (Single) or YL3Z-19G390-BA (10 pack).

RKE/VSS/RMST MODULE WIRE HARNESS

POWER WINDOW INTERRUPT

	Color	Function
B-10	BLUE/BLACK	Active Output



CAUTION: REMOVE YELLOW WIRE AND TERMINAL FROM RELAY SOCKETS