READ ME FIRST

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

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

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

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

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

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

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

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

DO NOT CLAIM PARTS WARRANTY ON FORM 1863

Parts Warranty Processing:

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

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

   Ford Service Parts
   180 Marcus Blvd.
   Hauppauge, NY 11788

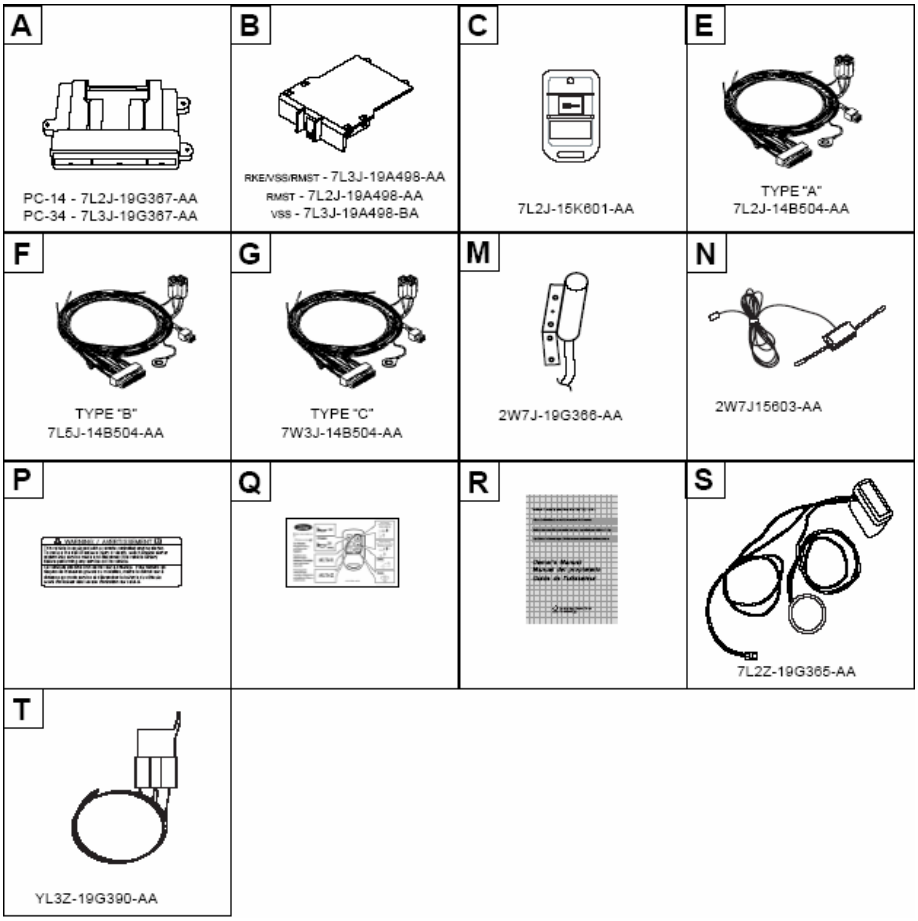
   Note: If the package is sent without a claim number/claim number visible on the outside of the package, the shipment will be refused and returned at sender's expense.

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

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

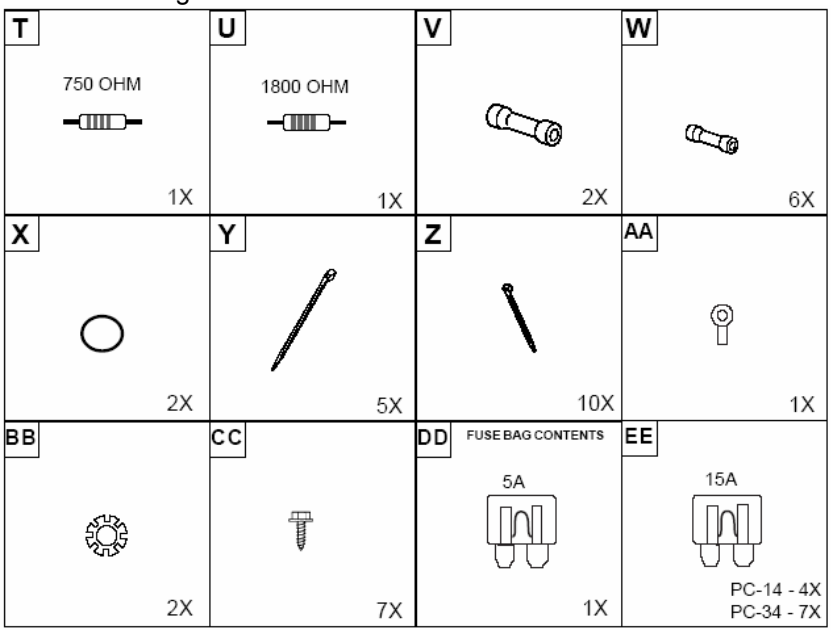
REFERENCE SECTION

KIT CONTENTS



PARTS BAG CONTENTS

NOTE: Part bag contents are not available as service items

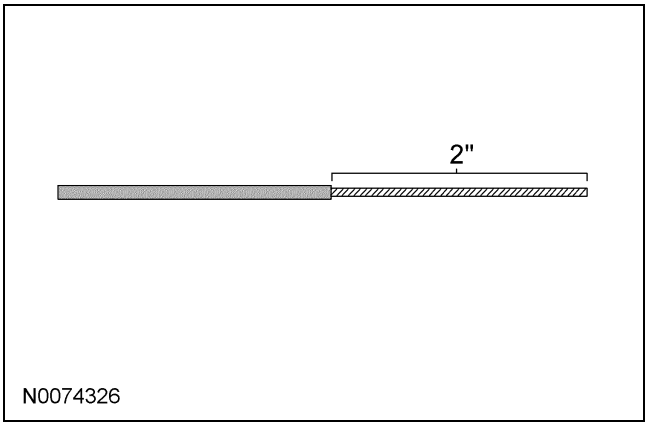


GENERAL PROCEDURES

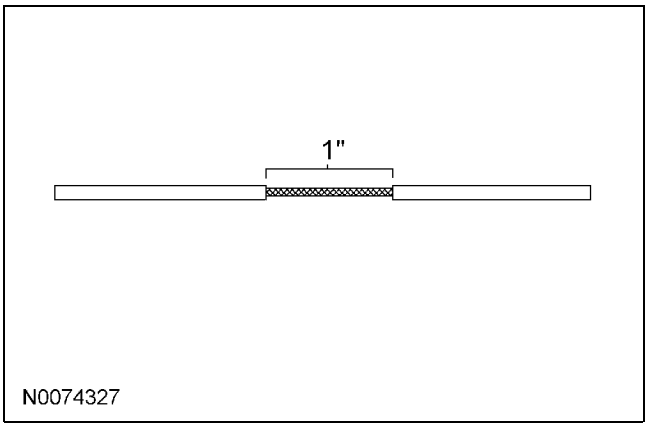
Proper Splicing Techniques

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

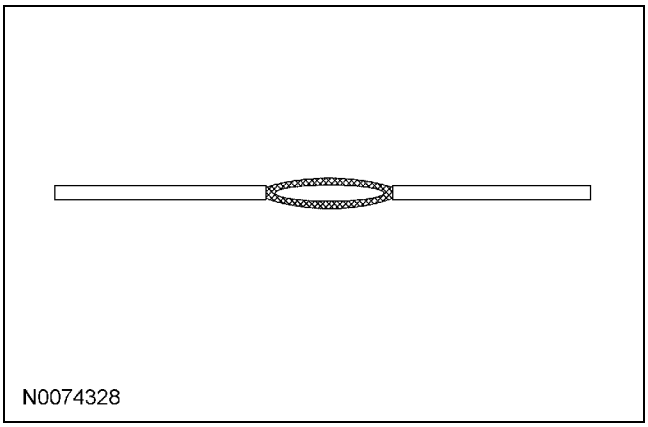
1. Strip approximately two inches of insulation from the wire to be installed in the vehicle.



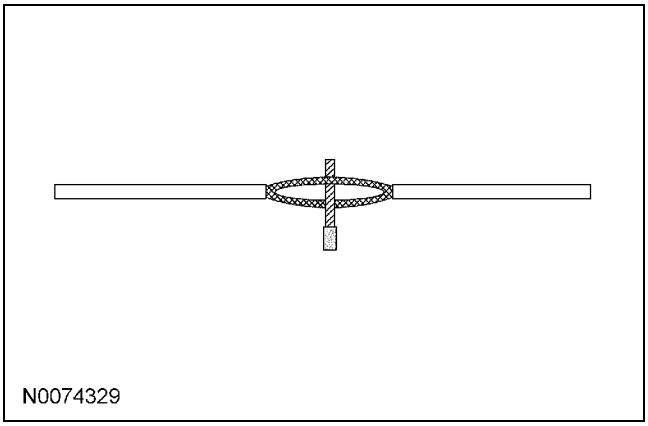
2. On the vehicle wire to be spliced into, strip one inch of insulation form the wire.



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.

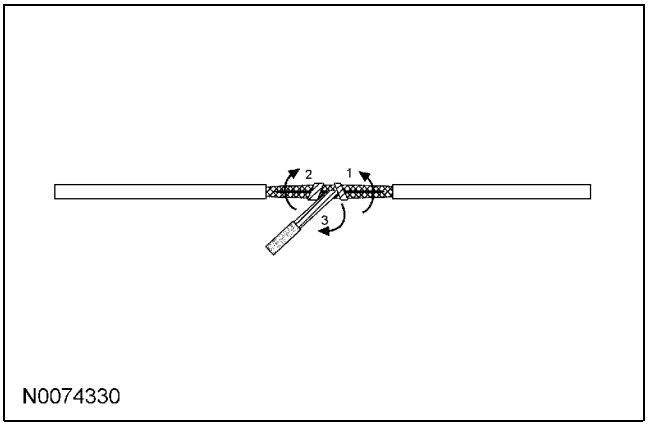


4. Insert the new wire between the parted strands. If more than one wire is being spliced, wrap them in opposite directions.



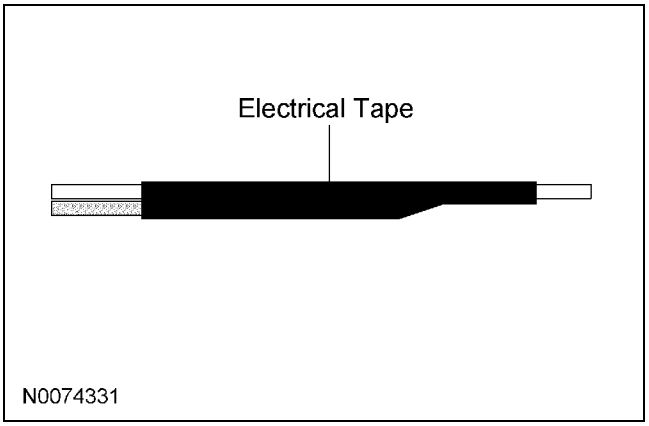
NOTE: Use Rosin Core Mildly-Activated (RMA) Solder. Do not use Acid Core Solder.

5. Wrap the new wire around one side of the split stands, 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.

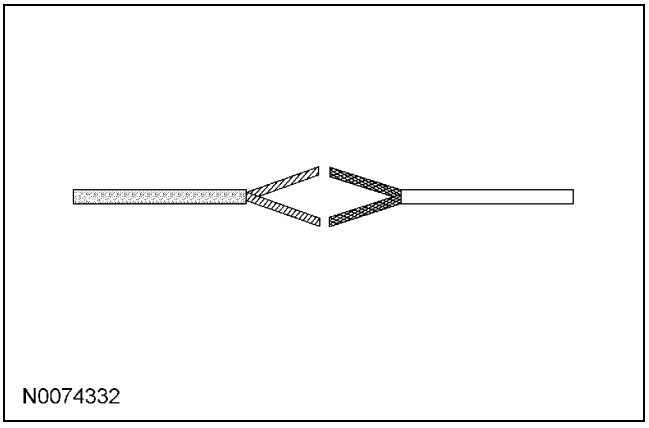


Splicing End to End Connections

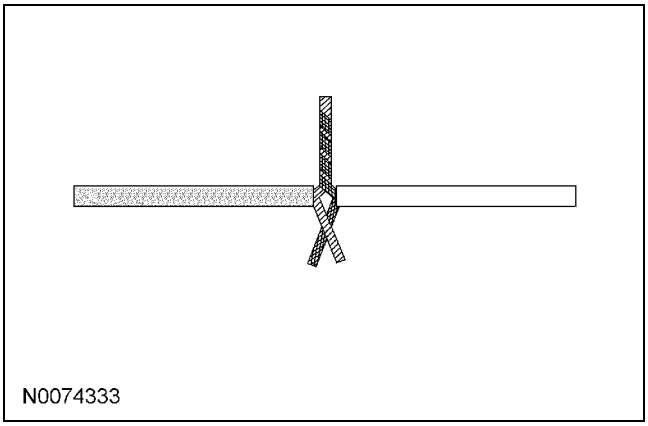
NOTE: When both ends of the wire are cut, use the end to end wire splicing procedure.

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.

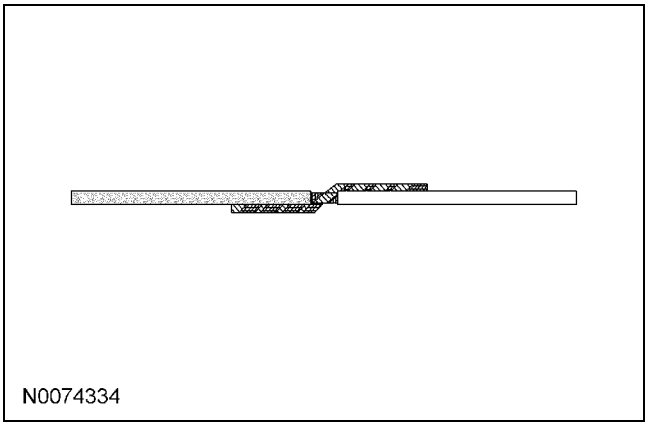


2. Place the wires next to each other and twist the upper and lower strands together as shown.

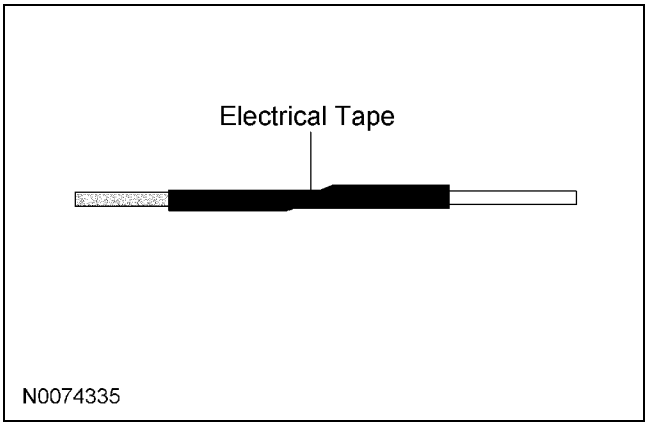


NOTE: Use Rosin Core Mildly-Activated (RMA) Solder. Do not use Acid Core Solder.

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 Contents

RKE/VSS/REMOTE START SYSTEM INSTALLATION

CONTENTS

INSTALLATION

Remote Start

Crown Victoria/Grand Marquis

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

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

1. Verify correct kit number.

Review RKE/VSS/RMST Installation Kit Contents

NOTE: Kits are vehicle specific and are not interchangeable.

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

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

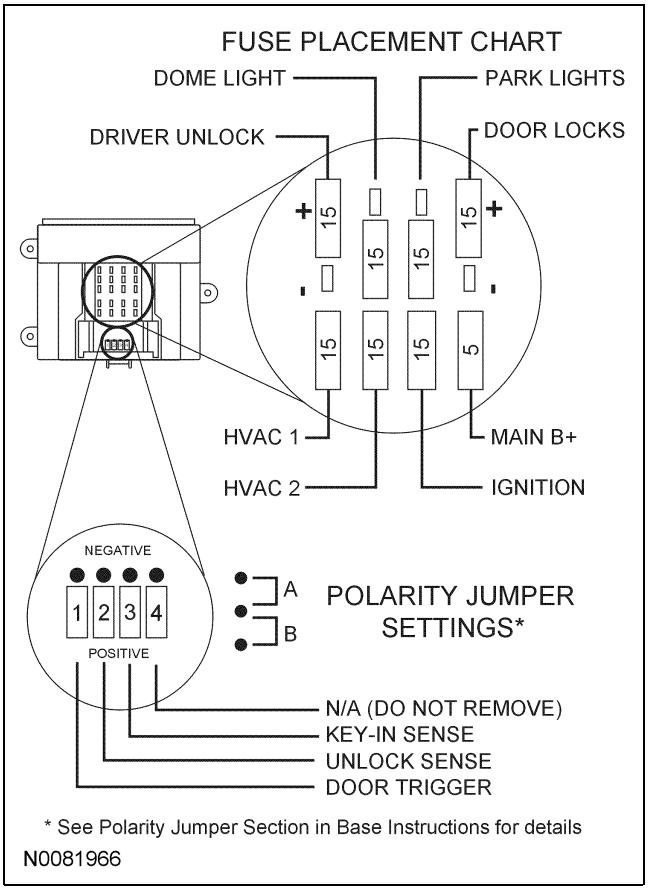
QUANTITY	DESCRIPTION
1	MODULE ASSEMBLY
1	RKE/VSS/RMST SOFTWARE CARTRIDGE ASSEMBLY
2	6 BUTTON POWERCODE TRANSMITTER
3	WIRING HARNESS ASSEMBLIES
1	DIPOLE ANTENNA
1	HOOD SAFETY SWITCH ASSEMBLY
1	INSTALLATION PARTS BAG
1	FUSE PARTS BAG
1	OPERATORS INSTRUCTIONS
1	OPERATORS QUICK REFERENCE WALLET CARD

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

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

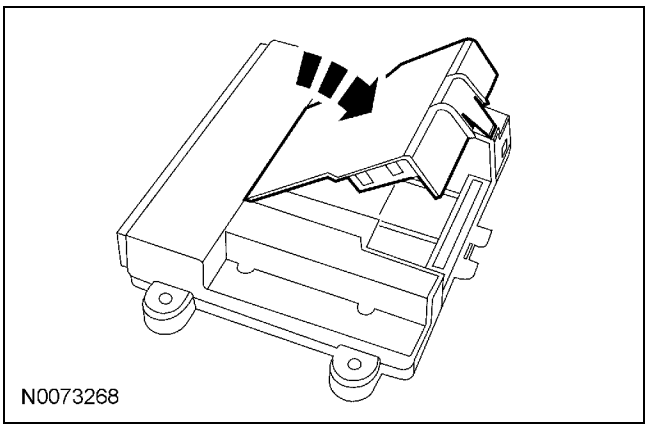
Module Preparation

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



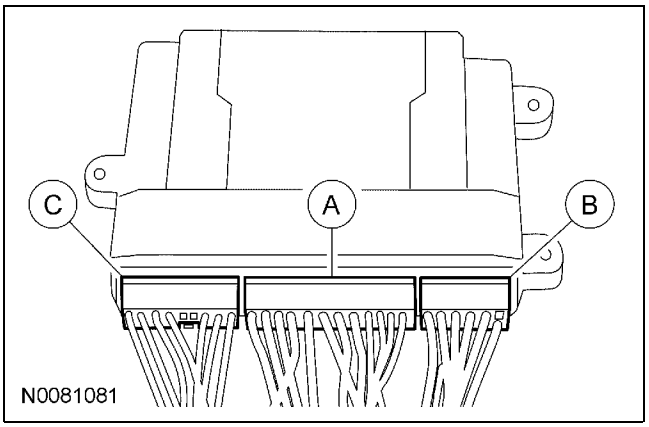
4. Place the software cartridge onto the RKE/VSS/RMST control module.

INSTALLATION (Continued)



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

6.



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

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

   Connect 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.

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

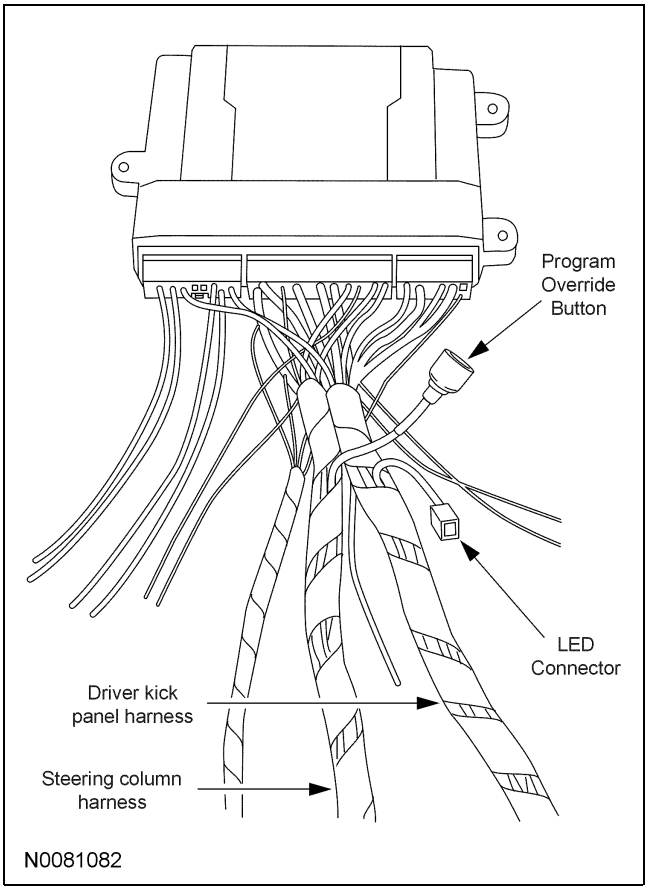
   Cut and tape off the following wires.
   - C-10 Red/White wire in the C connector.

9. **NOTE:** Skip this step if Optional/Features - Rear Defroster activation is installed.

   Cut and tape off the following wires.
   - C-11 Blue/White wire in the C connector.

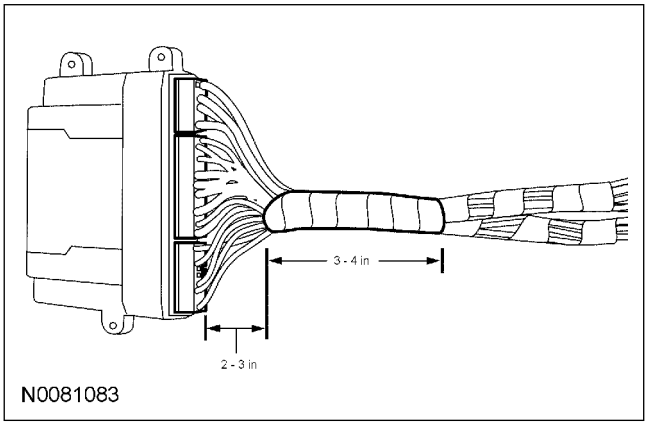
10. Referring to the vehicle specific wiring section for the system being installed, gather all individual wires that will be routed to the same areas of the vehicle into groups. Cover each wire group with electrical tape for approximately 18''. Depending on the vehicle, there will be 2 to 5 different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

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



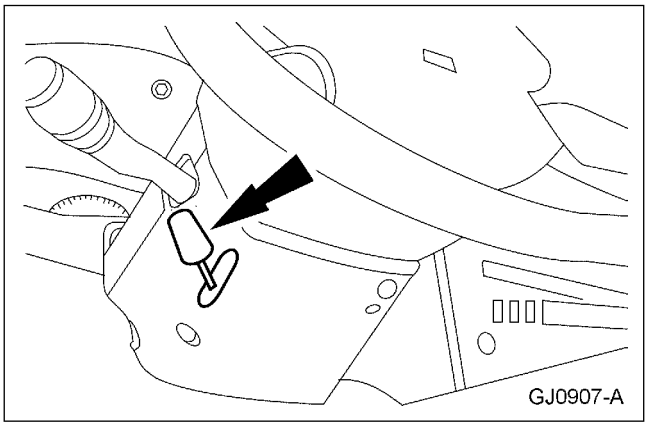
11. Tape the harness sections together, making sure to cover all of the unused wires.

INSTALLATION (Continued)



Vehicle Preparation

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



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

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

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

15. Remove the driver door exterior mirror cover.

16. ***NOTICE:*** **Use care not to damage the trim panel when removing the interior door handle.**

    Remove the driver door handle cup screw cover, screw and door handle and cup.

17. ***NOTICE:*** **Use a shop towel or similar material between the tool and the front door trim panel or damage to the front door trim panel may occur.**

    Release the window control switch plate from the driver door trim panel, and disconnect the window regulator switch electrical connectors.

18. Remove the 4 front door trim panel screws and position the driver door trim panel aside.

19. Disconnect the 3 electrical connectors and remove the driver door 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.

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

Install The Dipole Antenna

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

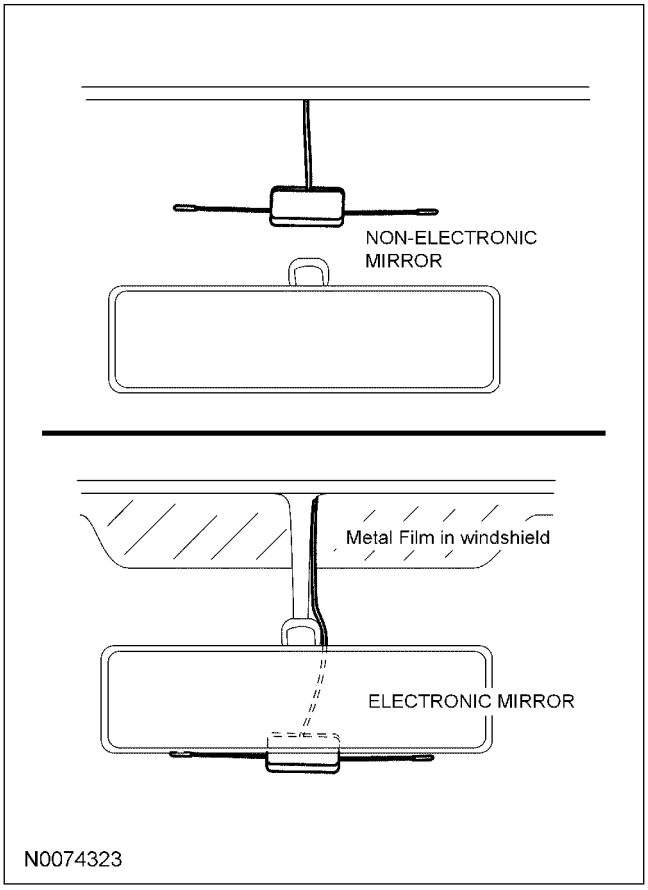
INSTALLATION (Continued)

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

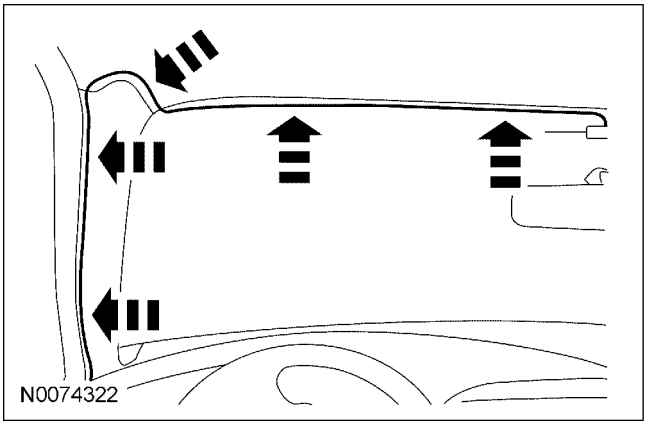
    NOTE: Make sure that the long wire on the antenna is pointing toward the top of the windshield since this wire will be routed along the headliner.

    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.

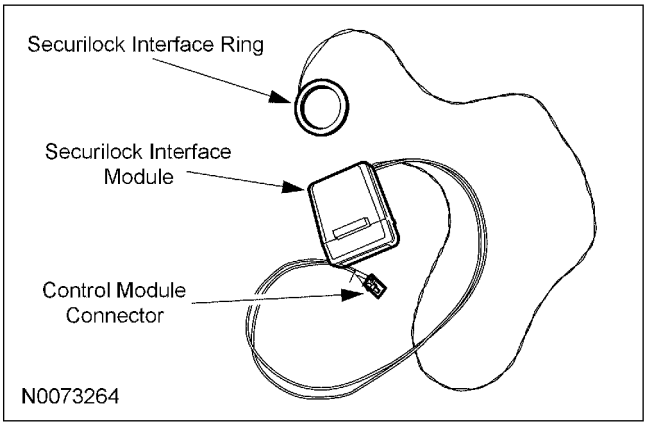


23. Route the dipole antenna cable along the headliner and down the A pillar toward the floor. The wire can be tucked behind the headliner without removing or loosening any of the trim panels.

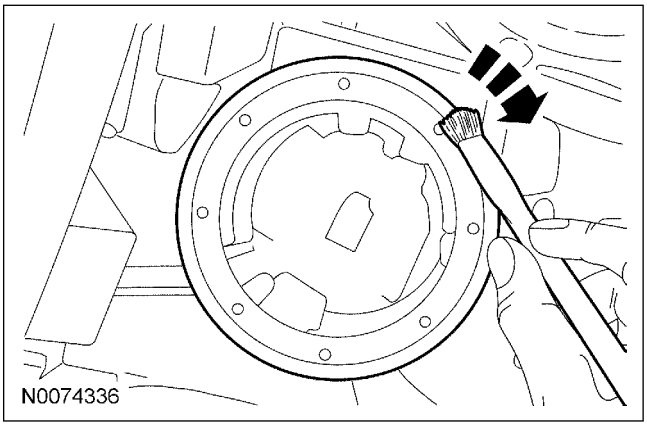


Install The Securilock Interface Kit

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



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

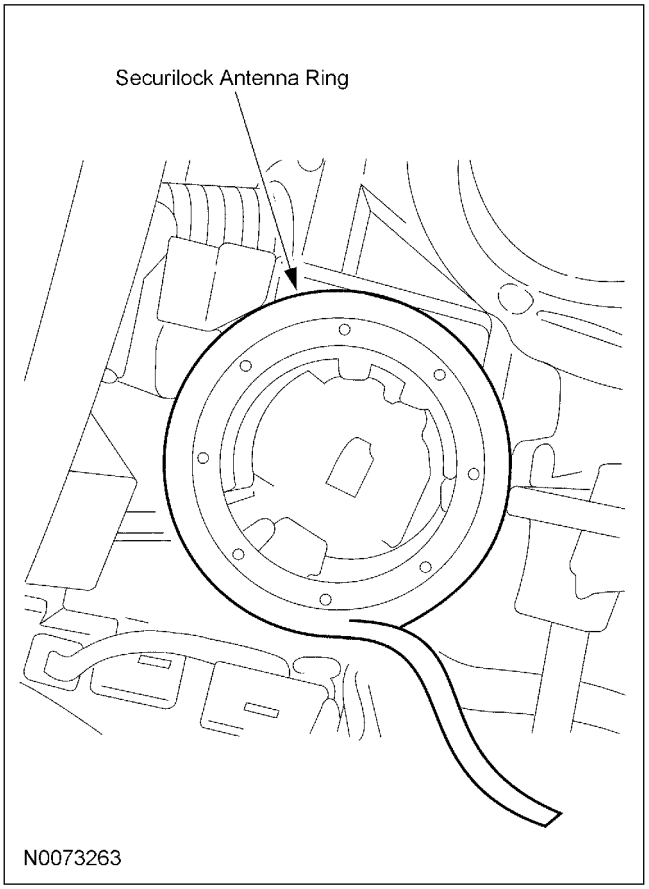


INSTALLATION (Continued)

26. ***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.



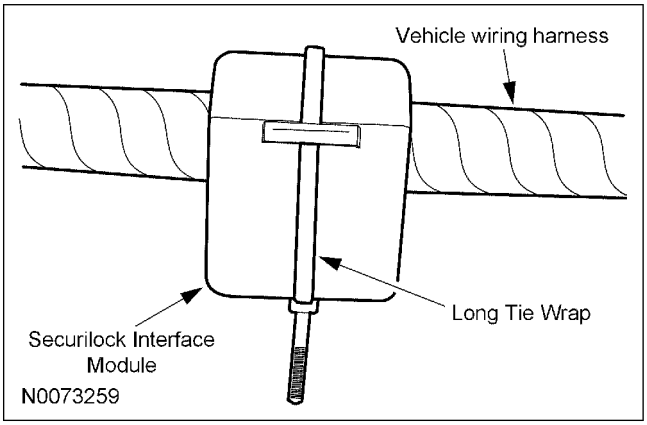
Install The Securilock Interface Module

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

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

28. ***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

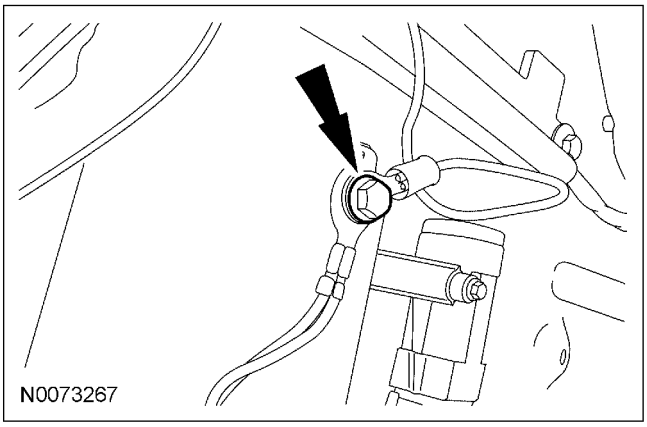
29. Place the RKE/VSS/RMST Control Module and Harness Assembly in the vehicle.

Identify Circuit Wires For Connections

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

NOTE: For proper wire splicing techniques click here.

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



INSTALLATION (Continued)

31. **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 Violet/Orange ignition circuit wire at the ignition switch harness.

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

33. **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 run circuit wire at the ignition switch harness.

34. Connect the Orange wire from the control module harness to the Grey/Yellow run circuit wire at the ignition switch harness.

35. **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 White/Violet run/acc circuit wire at the ignition switch harness.

36. Connect the Orange/White wire from the control module harness to the White/Violet run/acc circuit wire at the ignition switch harness.

37. **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 Dark Green starter circuit wire at the ignition switch harness.

38. Connect the Violet wire from the control module harness to the Dark/Green starter circuit wire at the ignition switch harness.

39. **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 Grey/Yellow Key-in-sense circuit wire at the ignition switch harness.

40. Connect the Black/White wire from the control module harness to the Grey/Yellow Key-in-sense circuit wire at the ignition switch harness.

41. **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.

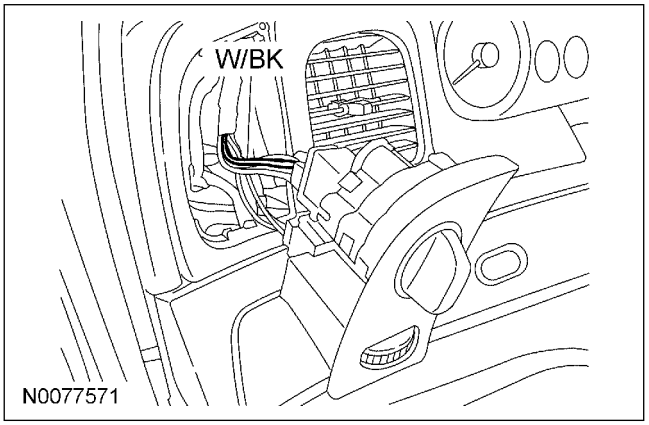
42. Connect the Brown/Black wire from the control module harness to the Dark Blue horn circuit wire in the steering column harness.

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

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

    Identify the White/Black parking lights on circuit wire at the Headlight Switch.

INSTALLATION (Continued)



44. Connect the White wire from the control module harness to the White/Black parking lights on circuit wire at the Headlight Switch.

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

    NOTE: A logic probe connected to the correct wire will show ground with the vehicle door(s) open and the dome light ON, then show open 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/White dome light output circuit wire at the dimmer switch. location.

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

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

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

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

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

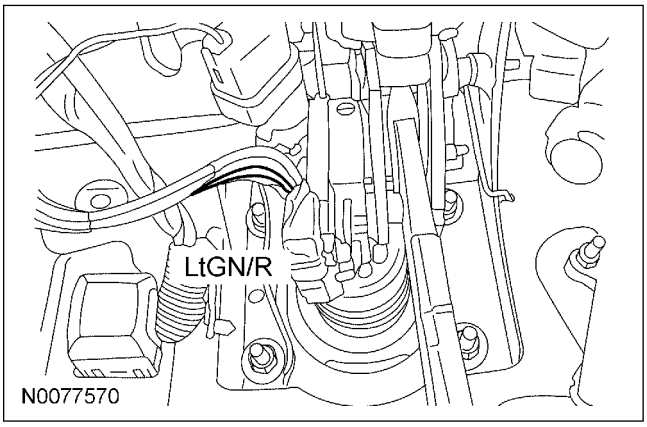
    Identify the Black/Light Blue dome light circuit wire at the under dash light location.

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

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

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

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



50. Connect the Brown wire from the control module harness to the Light Green/Red brake switch circuit wire at the brake switch.

INSTALLATION (Continued)

51. **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 power door unlock motor circuit wire at the Driver Door Module (DDM) in the driver door.

52. Connect the Brown wire from the control module harness to the Red/Orange power door unlock motor circuit wire at the DDM in the driver door.

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

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

    Identify the Pink/Black power door lock motor circuit wire at the DDM in the driver door.

54. Connect the White/Blue wire from the control module harness to the Pink/Black power door lock motor circuit wire at the DDM in the driver door.

55. **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 Pink/Orange power door unlock motor circuit wire at the DDM in the driver door.

56. Connect the Light Green wire from the control module harness to the Pink/Orange power door unlock motor circuit wire at the DDM in the driver door.

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 Pink/Light Green door unlock circuit wire at the DDM in the driver door.

58. Connect the Green wire from the control module harness to the Pink/Light Green door unlock circuit wire at the DDM in the driver door.

59. **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/Yellow door lock circuit wire at the DDM in the driver door.

60. Connect the Blue wire from the control module harness to the Pink/Yellow door lock circuit wire at the DDM in the driver door.

61. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V while depressing the trunk release switch.

    A logic probe will show open on the correct wire, then show power while depressing the trunk release switch.

    Identify the White/Violet trunk release circuit wire at the DDM in the driver door.

62. Connect the Blue/Green wire from the control module harness to the White/Violet trunk release circuit wire at the DDM in the driver door.

63. **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 open on the correct wire, then show ground when the factory disarm switch is activated.

    Identify the Dark Green/Violet factory disarm circuit wire at the driver door key switch.

INSTALLATION (Continued)

64. Connect the Light Green/Black wire from the control module harness to the Dark Green/Violet factory disarm circuit wire at the driver door key switch

Vehicle w/o Factory RKE (Section may not be necessary Wires may not exist)

65. **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/Yellow door lock circuit wire at the driver door jamb boot harness.

66. Cut the Pink/Yellow door lock circuit wire at the driver door jamb boot harness.

67. Connect the Blue/Black wire from the control module harness to the cut Pink/Yellow driver door lock circuit wire going to back towards the driver door.

68. Connect the Blue wire from the control module harness to the cut Pink/Yellow driver door lock circuit wire going to forward towards the vehicle interior.

69. **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/Light Green door unlock circuit wire at the driver door jamb boot harness.

70. Cut the Pink/Light Green door unlock circuit wire at the driver door jamb boot harness.

71. Connect the Green/Black wire from the control module harness to the cut Pink/Light Green door unlock circuit wire going to back towards the driver door.

72. Connect the Green wire from the control module harness to the cut Pink/Light Green door unlock circuit wire going to forward towards the vehicle interior.

Prepare Trunk Release Relay Vehicle w/o Factory RKE

73. Connect the circuit 86 Black wire to the circuit 87 Yellow wire.

74. Attach a 15 amp in-line fuse holder assembly to the circuit 87 Yellow wire.

75. **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 Light Green/Violet ignition wire at the ignition switch.

76. Connect the Yellow wire from the relay to the Light Green/Violet ignition wire at the ignition switch.

77. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V while depressing the trunk release switch.

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

    Identify the Violet/Yellow trunk release circuit wire at the driver door jamb boot harness.

78. Cut the Violet/Yellow trunk release circuit wire at the driver door jamb boot harness.

79. Connect the Red wire from the relay to the Violet/Yellow trunk release circuit wire at the driver door jamb boot harness going to back towards the driver door.

80. Connect the Blue wire from the relay to the Violet/Yellow trunk release circuit wire at the driver door jamb boot harness going to the rear of the vehicle.

81. Connect the White wire from the relay harness to the Blue/Green wire from the control module harness.

INSTALLATION (Continued)

Optional Connections/Features - Driver Door Priority Unlock

82. **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 DDM in the driver door.

83. Cut the Red/orange door unlock circuit wire at the DDM in the driver door.

84. 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.

85. 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 - Headlights

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

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

    Identify the Red/Yellow headlight circuit wire at the Headlight Switch.

87. Connect the Red/White wire from the control module harness to the Red/Yellow headlight circuit wire at the Headlight Switch.

Optional Connections/Features - Rear Defroster Activation

88. **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 Dark Blue/Orange rear defroster circuit wire at the defroster switch or the DDM.

89. Connect the Blue/White wire from the control module harness to the Dark Blue/Orange rear defroster circuit wire at the defroster switch or DDM.

Install The Hood Safety Switch

90. **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.

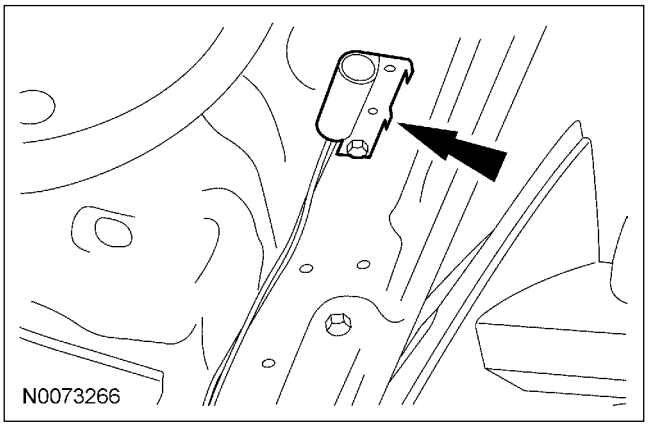
    NOTE: The switch should be positioned about 30 degrees below parallel to the ground to accommodate for parking on inclines.

    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

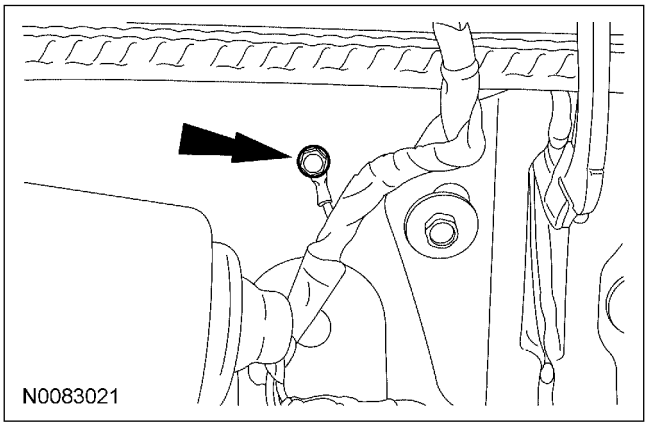
    Locate an easy to access area near the driver side hood hinge and install the hood safety switch using the supplied metal screws.

INSTALLATION (Continued)

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

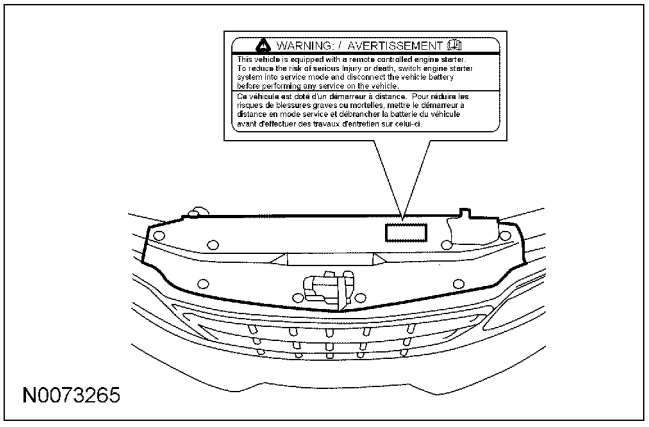


92. Connect hood switch ground wire to a suitable location on the bulkhead.



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

    Install the underhood warning label



94. 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.

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

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

Power Connection

97. **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 harness.

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

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

Program The RKE/VSS/RMST System

100. Refer to the RMST programming section for this vehicle click here.

Secure RKE/VSS/RMST Harness and Control Module

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

102. **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.

INSTALLATION (Continued)

Install Trim

103. Connect the 3 electrical connectors and install the driver door trim panel.
    - Install the 4 front door trim panel screws
104. Connect the window regulator switch electrical connectors. and install the window control switch plate to the driver door trim panel.
105. Install the door handle and cup.
    - Install the driver door handle cup screw and cover.
106. Install the driver door exterior mirror cover.
107. Install the left hand scuff plate and cowl trim panel.
108. Install the upper and lower steering column shrouds.

     Install the 3 screws.
109. Install the steering column tilt release lever/handle.

GENERAL PROCEDURES

Programming

Programming the Module

1. **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

2. 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.

3. Open the driver door.

   All other doors should remain closed.

4. Turn the ignition key to the RUN position.

5. Press and hold the remote start system override button for at least 10 seconds.

   After 10 seconds the horn with honk 3 times, indicating the system is now in the learn mode.

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.

GENERAL PROCEDURES (Continued)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

NOTE: The remote start module is now programmed.

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

Programming the SECURILOCK

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

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

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

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

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

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

GENERAL PROCEDURES (Continued)

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

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

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

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

GENERAL PROCEDURES

Functional Test

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

NOTE: For remote start troubleshooting guide click here.

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

Troubleshooting

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

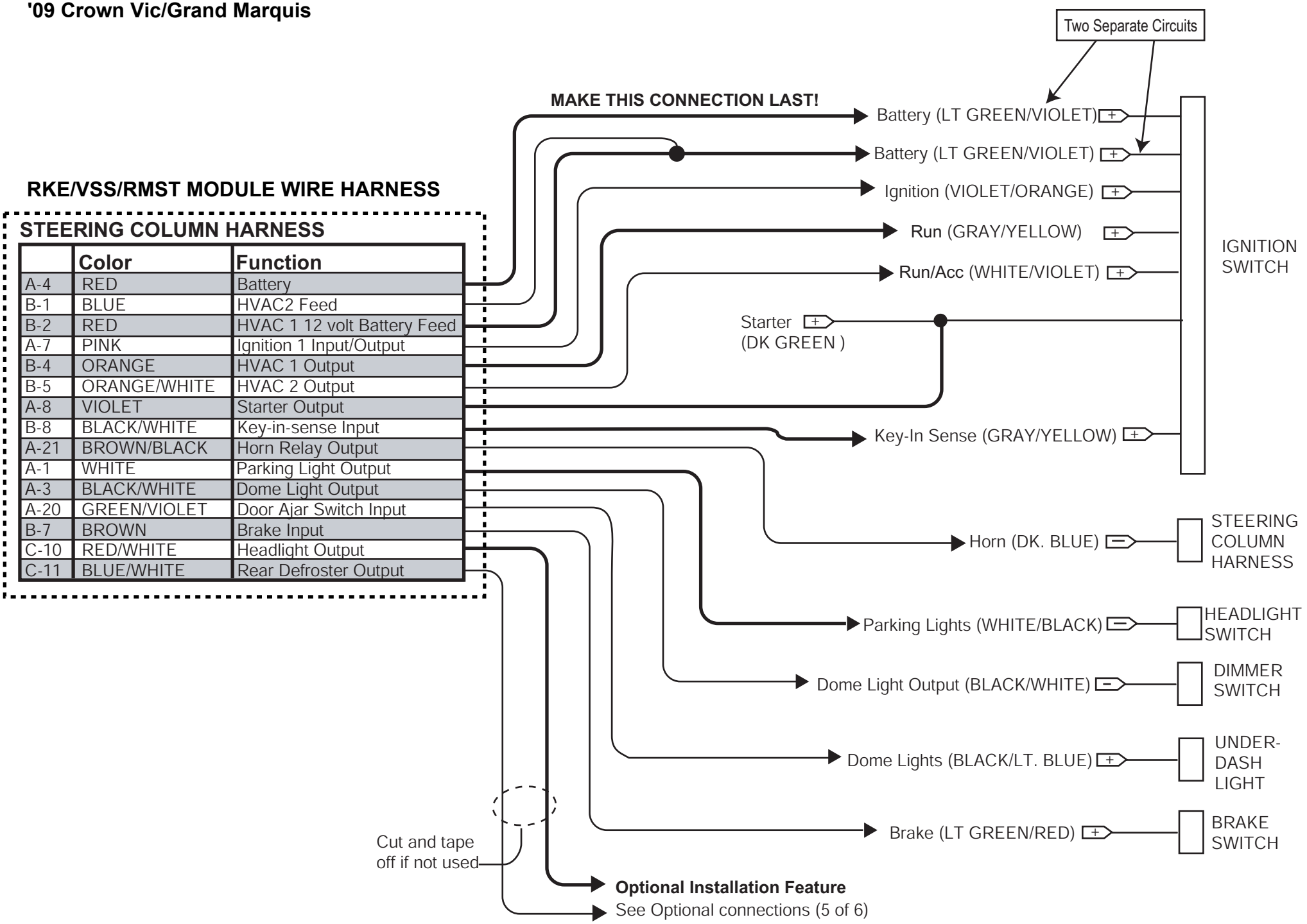
    Example: Depress the remote start fob button for 3 seconds and then release. The vehicle horn will ''chirp'' one time to indicate that RMST signal was received. If the vehicle doesn't start and the horn ''chirps'' 3 times, there is a fault - ''Vehicle Door is Open''

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

GENERAL PROCEDURES (Continued)

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

'09 Crown Vic/Grand Marquis



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 12 volt 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-1	WHITE	Parking Light Output
A-3	BLACK/WHITE	Dome Light Output
A-20	GREEN/VIOLET	Door Ajar Switch Input
B-7	BROWN	Brake Input
C-10	RED/WHITE	Headlight Output
C-11	BLUE/WHITE	Rear Defroster Output

'10 Crown Vic/Grand Marquis

WITH FACTORY RKE

MAKE THIS CONNECTION FIRST!

CHASSIS GROUND POINT
IN DRIVER' S KICK PANEL

RKE/VSS/RMST MODULE WIRE HARNESS

DRIVER'S KICK PANEL HARNESS

	Color	Function
A-5	BLACK	Ground
A-9	BROWN	Disarm Input
A-11	WHITE/BLUE	Arm Input
A-12	LT GREEN	Unlock Switch Sense
A-14	GREEN	Door Unlock Output
A-2	BLUE	Door Lock Output
A-24	BLUE/GREEN	Trunk Release Output
C-4	LT GREEN/BLACK	Factory Alarm Disarm Output

Driver Door Unlock Motor (RED/ORANGE) +

Driver Door Lock Motor (PINK/BLACK) +

Passenger Door Unlock Motor (PINK/ORANGE) +

Door Unlock (PINK/LT. GREEN) +

Door Lock (PINK/YELLOW) +

Trunk Release (WHITE/VIOLET) +

DDM
IN DRIVERS
DOOR

2006MY Factory Alarm Disarm (DK. GREEN/VIOLET) −

IN DRIVER'S
DOOR AT KEY
SWITCH

CONNECTIONS UNDER HOOD

	Color	Functiont
A-19	GRAY	Hood Open Switch Input

Vehicle Interior

Engine Compartment

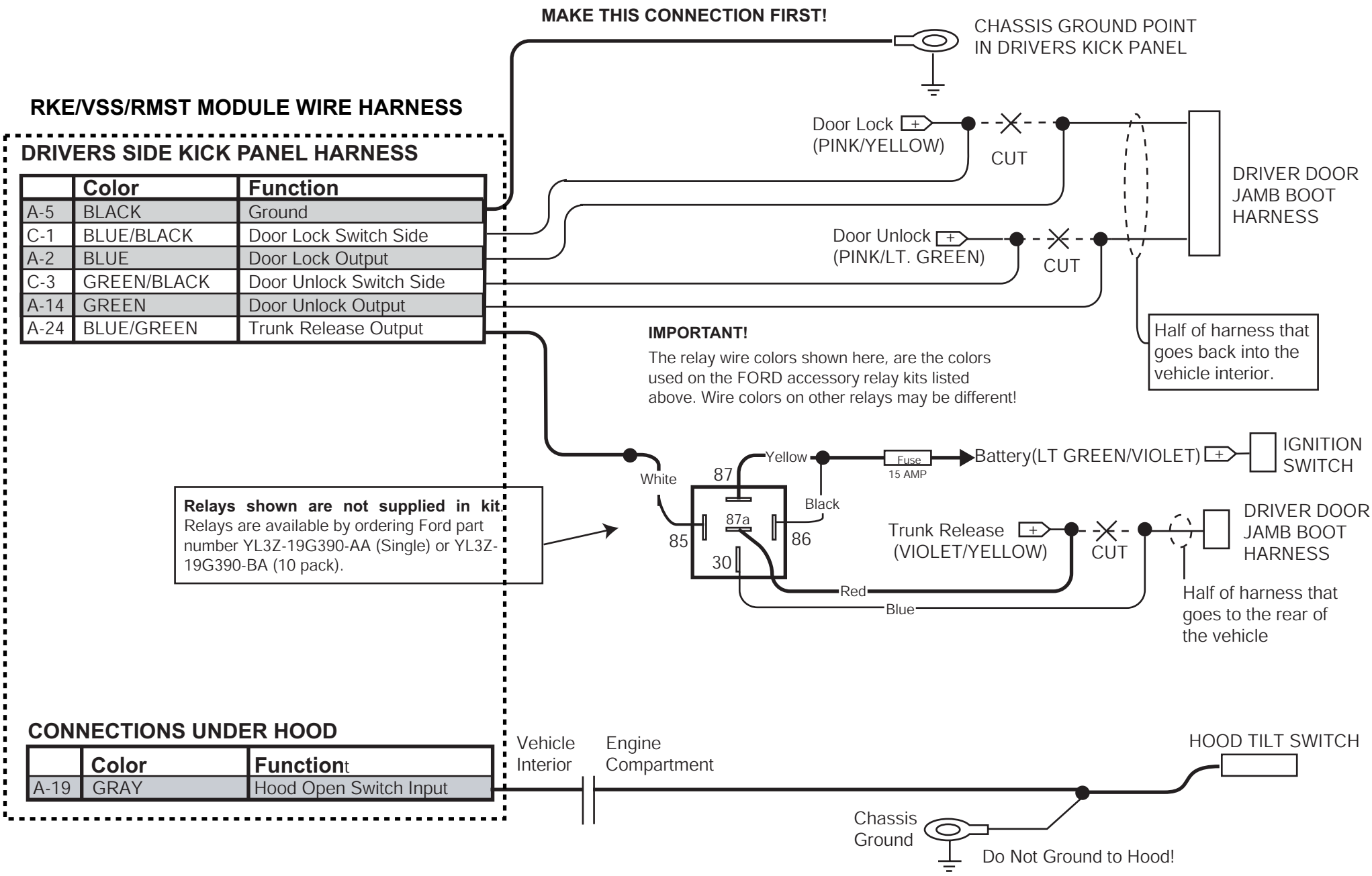
HOOD TILT SWITCH

Chassis Ground

Do Not Ground to Hood!

'10 Crown Vic/Grand Marquis

WITHOUT FACTORY RKE



	Color	Function
A-5	BLACK	Ground
C-1	BLUE/BLACK	Door Lock Switch Side
A-2	BLUE	Door Lock Output
C-3	GREEN/BLACK	Door Unlock Switch Side
A-14	GREEN	Door Unlock Output
A-24	BLUE/GREEN	Trunk Release Output

	Color	Functiont
A-19	GRAY	Hood Open Switch Input

'10 Crown Vic/Grand Marquis

OPTIONAL CONNECTIONS / FEATURES

OPTION PROGRAMMING REQUIREMENTS

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

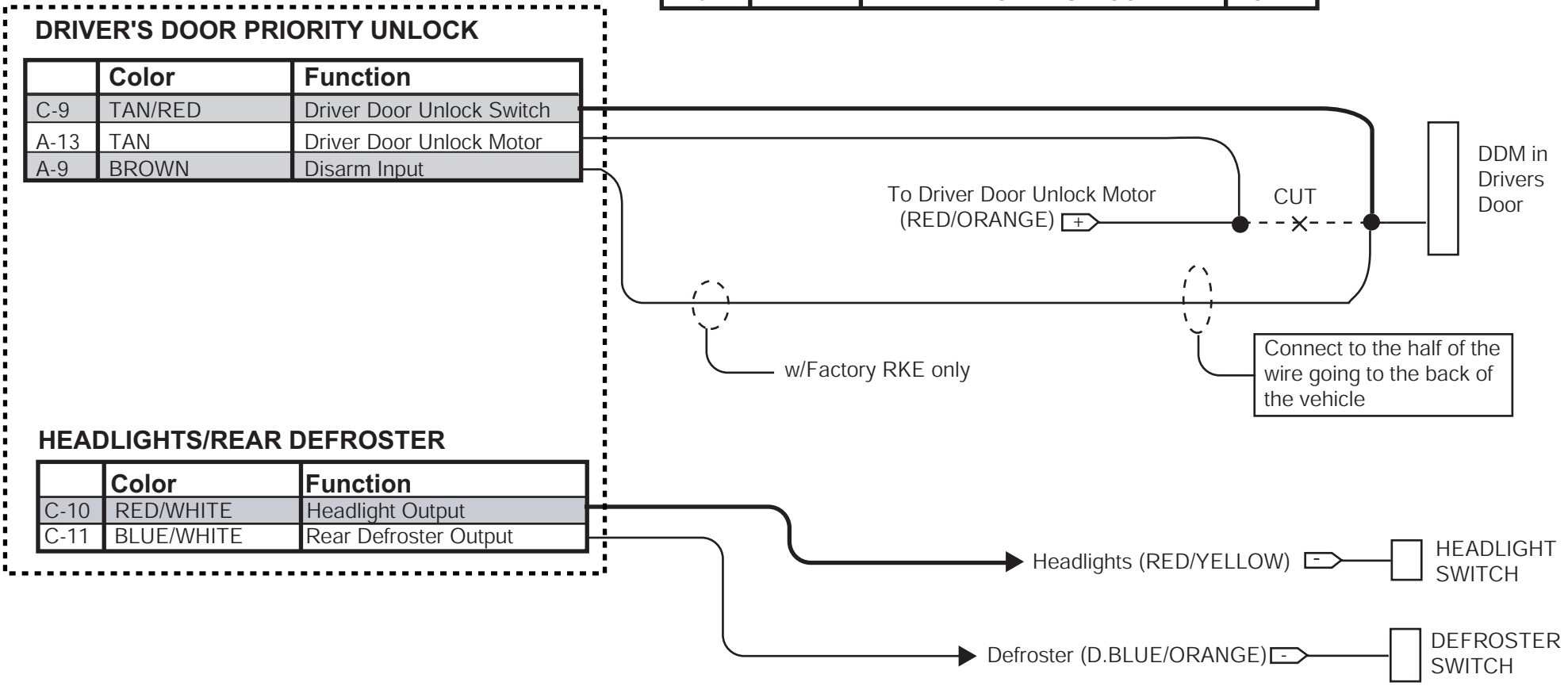
RKE/VSS/RMST MODULE WIRE HARNESS

DRIVER'S DOOR PRIORITY UNLOCK

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

HEADLIGHTS/REAR DEFROSTER

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



Manual Table of Contents

RKE/VSS/REMOTE START SYSTEM INSTALLATION

CONTENTS

INSTALLATION

Remote Start

Mustang

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

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

1. Verify correct kit number.

Review RKE/VSS/RMST Installation Kit Contents

NOTE: Kits are vehicle specific and are not interchangeable.

2. Review Remote Keyless Entry/Vehicle Security System/Remote Start (RKE/VSS/RMST) Installation Kit Contents

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

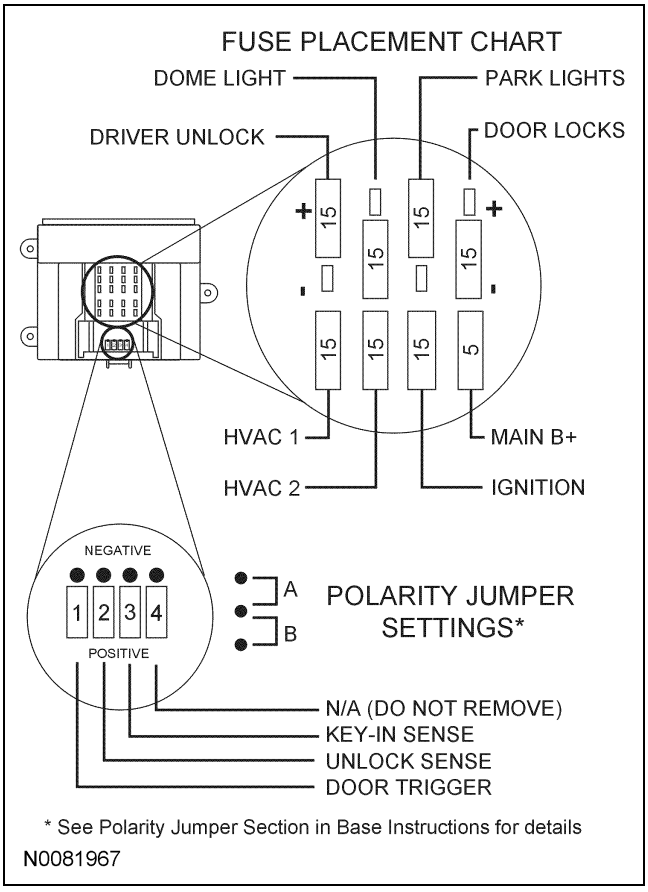
QUANTITY	DESCRIPTION
1	MODULE ASSEMBLY
1	RKE/VSS/RMST SOFTWARE CARTRIDGE ASSEMBLY
2	6 BUTTON POWERCODE TRANSMITTER
3	WIRING HARNESS ASSEMBLIES
1	DIPOLE ANTENNA
1	HOOD SAFETY SWITCH ASSEMBLY
1	INSTALLATION PARTS BAG
1	FUSE PARTS BAG
1	OPERATORS INSTRUCTIONS

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)

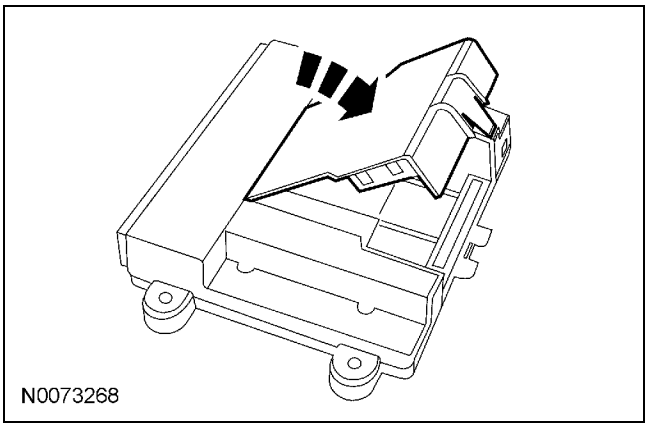
Module Preparation

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.

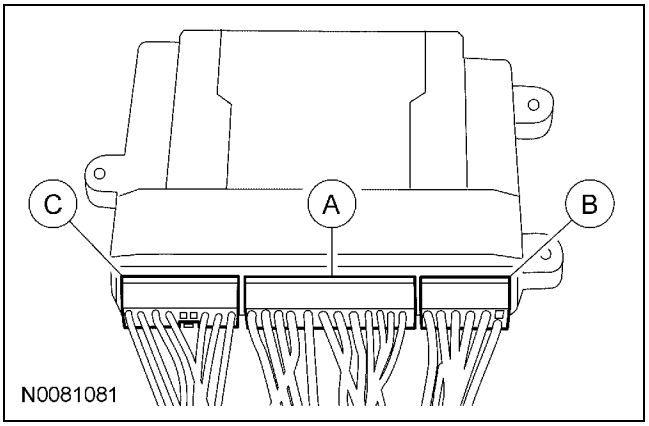


INSTALLATION (Continued)

4. Place the software cartridge onto the 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.



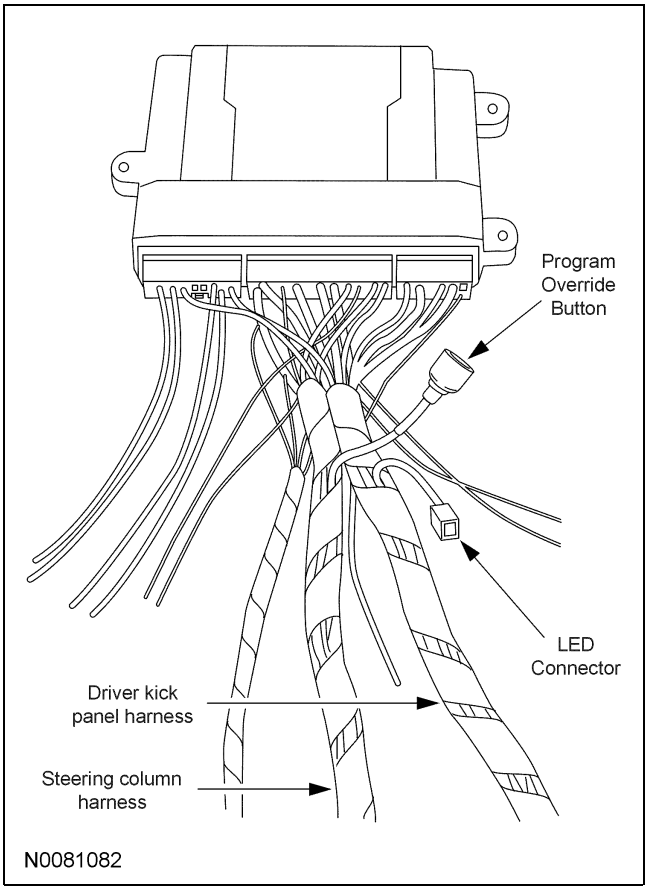
6. **NOTE:** Do not cut the override programming button off of the harness, it is used for all installations.

   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.

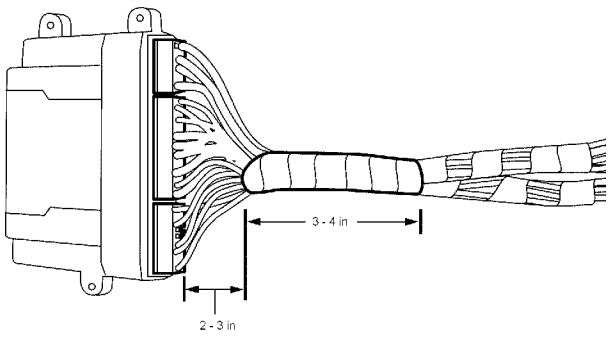
7. Referring to the vehicle specific wiring section for the system being installed, gather all individual wires that will be routed to the same areas of the vehicle into groups. Cover each wire group with electrical tape for approximately 18''. Depending on the vehicle, there will be 2 to 5 different 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 left hand scuff plate and cowl trim panel.

10. Remove the 2 lower instrument panel steering column cover screws and the cover.

11. Remove the 4 bolts and the steering column opening trim panel reinforcement.

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

    Remove the 3 lower steering column shroud screws, then separate the upper and lower shrouds.

13. Remove the right hand scuff plate, cowl trim panel and fuse door 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.

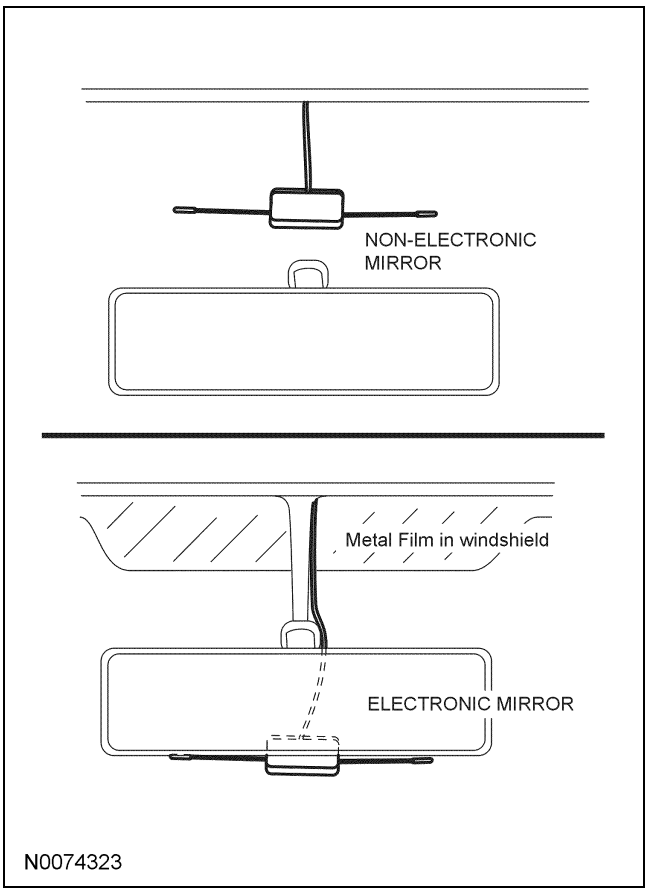
16. **NOTE:** Do not touch the adhesive, reduced adhesion may result.

    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.

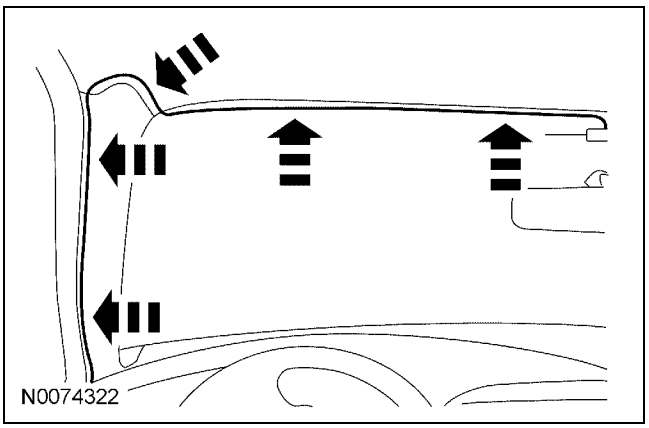
    NOTE: The wire will be attached to the control module later in this procedure.

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

INSTALLATION (Continued)

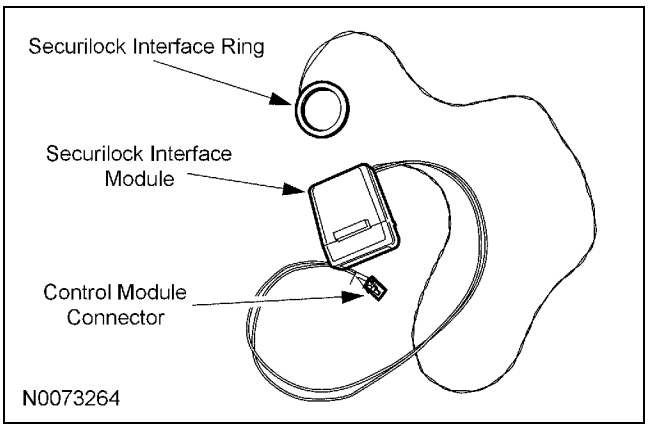


17. Route the dipole antenna cable along the headliner and down the A pillar toward the floor. The wire can be tucked behind the headliner without removing or loosening any of the trim panels.

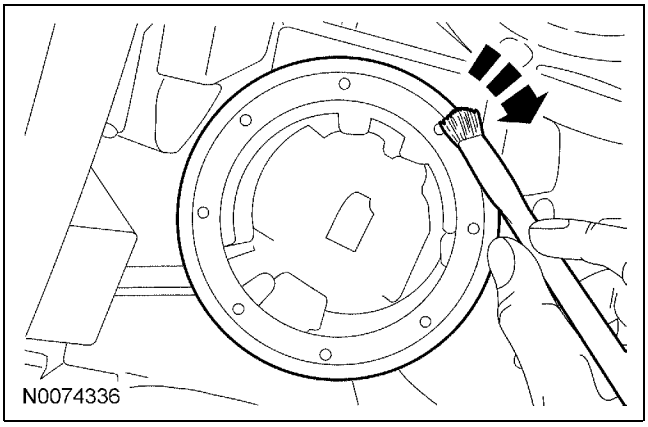


Install The Securilock Interface Kit

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.

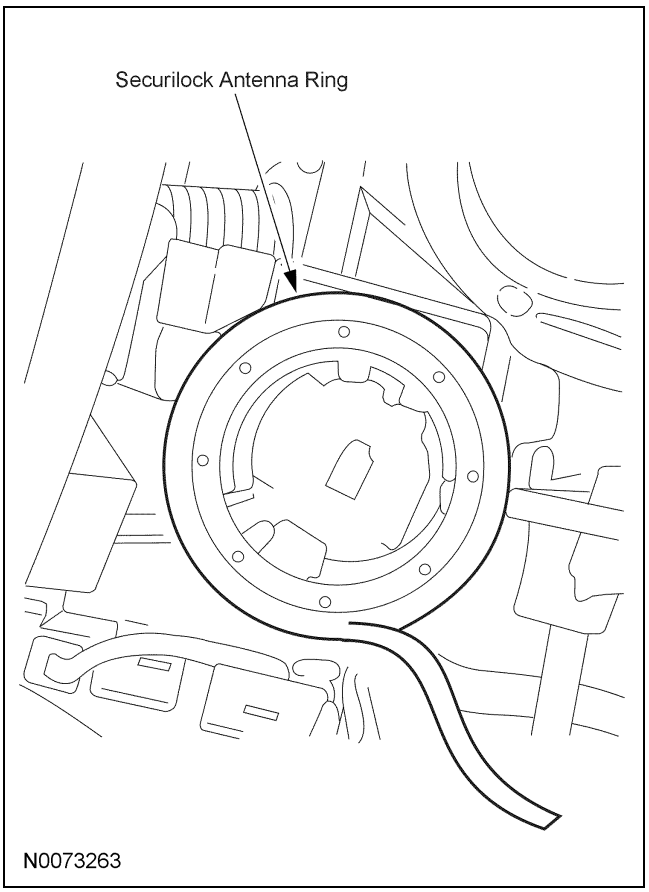


20. ***NOTICE:*** **Do not damage the transceiver ring during installation or while installing the steering column shrouds.**

    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)



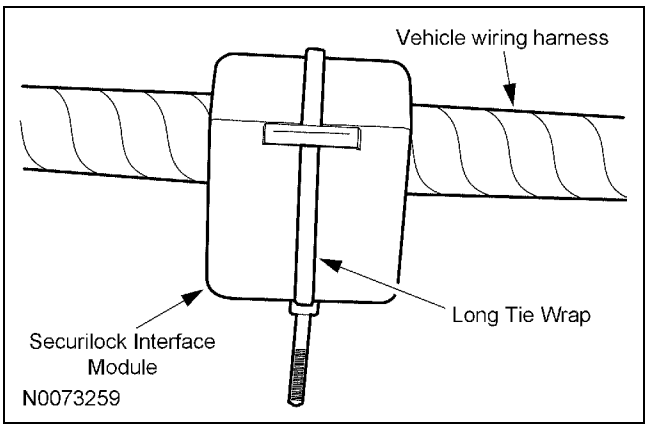
Install The Securilock Interface Module

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

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

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

    Route the harness and connector the to module mounting location.



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

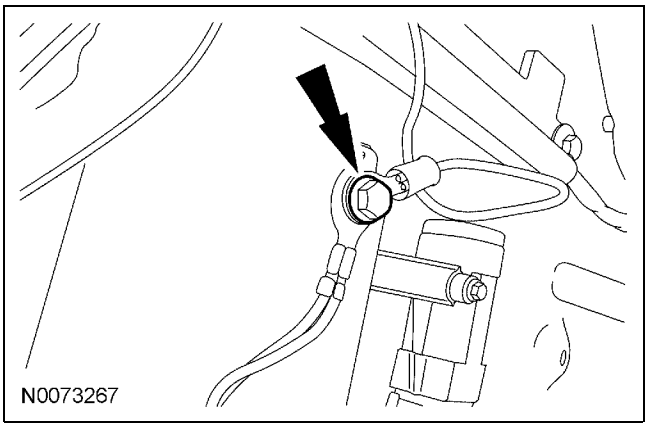
23. Place the RKE/VSS/RMST module and harness assembly in the vehicle.

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 control 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 position.

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

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

30. Connect the Black/White wire from the control module harness to the Blue/Grey key-in-sense 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 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.

    NOTE: Wire is located inside wire convolute running to connector C260 but does not terminate. Wire can be found within 2-6'' from connector on the side heading into main IP harness in a looped fashion underneath bright green tape.

    Identify the Blue/White horn circuit wire under dash panel.

34. Connect the Brown/Black wire from the control module harness to the Blue/White horn circuit wire under dash panel.

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

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

    NOTE: Wire is located inside wire convolute running to connector C260 but does not terminate. Wire can be found within 2-6'' from connector on the side heading into main IP harness in a looped fashion underneath bright green tape.

    Identify the Violet/White brake switch circuit wire under dash panel.

36. Connect the Brown wire from the control module harness to the Violet/White brake switch circuit wire under dash panel.

INSTALLATION (Continued)

37. **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 open with the vehicle door(s) closed and the dome light off.

    NOTE: Wire is located inside wire loom running to connector C260 but does not terminate. Wire can be found 4'' from connector on the side heading toward the bulkhead of the vehicle in a looped fashion underneath bright green tape.

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

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

    Identify the Grey/Violet dome light circuit wire under dash panel.

38. Connect the Green/Violet wire from the control module harness to the Grey/Violet dome light circuit wire under dash panel.

39. **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 at the Smart Junction Box (SJB) connector C2280D Pin 6.

40. Connect the White/Blue wire from the control module harness to the Gray/Brown lock all motors circuit wire at the SJB connector C2280D Pin 6.

41. **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.

    NOTE: Wire is located inside wire loom running to connector C260 but does not terminate. Wire can be found 4'' from connector on the side heading toward the bulkhead of the vehicle in a looped fashion underneath bright green tape.

    Identify the Blue/Green power door lock circuit wire under dash panel.

42. Connect the Blue wire from the control module harness to the Blue/Green wire under dash panel.

43. **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 SJB connector C2280C Pin 4.

44. Connect the Green wire from the control module harness to the Yellow/Violet door unlock circuit wire at the SJB connector C2280C Pin 4.

45. **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 motor circuit wire at the SJB connector C2280D Pin 28.

46. Connect the Brown wire from the control module harness to the Blue/Green driver door unlock motor circuit wire at the SJB connector C2280D Pin 28.

INSTALLATION (Continued)

47. **NOTE:** For vehicles equipped with factory alarm.

    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 open on the correct wire, then show ground when the factory disarm switch is activated.

    Identify the Green/Violet factory alarm disarm circuit wire at the SJB connector C2280C Pin 8.

48. Connect the Lt. Green/Black wire from the control module harness to the Green/Violet factory alarm disarm circuit wire at the SJB connector C2280C Pin 8.

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 Violet/Grey unlock all doors circuit wire at the SJB connector C2280D Pin 27.

50. Connect the Light Green wire from the control module harness to the Violet/Grey unlock all doors circuit wire at the SJB connector C2280D Pin 27.

51. **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.

    NOTE: Do NOT splice into any circuits leading to the back of the headlight switch. Doing so may lead to headlight switch failure.

    NOTE: Post J1 Running Change: Wire is located inside wire loom running to connector C260 but does not terminate. Wire can be found 4'' from connector on the side heading toward the bulkhead of the vehicle in a looped fashion underneath bright green tape.

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

52. **NOTE:** Post J1 Running Change: Wire is located inside wire loom running to connector C260 but does not terminate. Wire can be found 4'' from connector on the side heading toward the bulkhead of the vehicle in a looped fashion underneath bright green tape.

    Connect the White wire from the control module harness to the Violet/White parking light circuit wire at the SJB connector C2280E Pin 6.

53. **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 dome light switch.

54. Connect the Black/White wire from the control module harness to the Green/Blue dome light circuit wire at the dome light switch.

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

    A logic probe will show open on the correct wire, then show ground when the deck lid release switch is pressed.

    Identify the Brown/Violet deck lid release circuit wire at the SJB connector C2280C Pin 20.

56. Connect the Blue/Green wire from the control module harness to the Brown/Violet deck lid release circuit wire at the SJB connector C2280C 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 SJB connector C2280D Pin 28.

INSTALLATION (Continued)

58. Cut the Blue/Green door unlock circuit wire at the SJB connector C2280D Pin 28.

59. Connect the following wires to the side of the Red/orange door unlock circuit wire going to the back towards the SJB.
    - Tan/Red wire from the control module harness.
    - 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.

Optional Connections/Features - Headlight Illumination

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

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

    Identify the Green/Brown flash-to-pass circuit wire at the multifunction switch.

62. 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

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

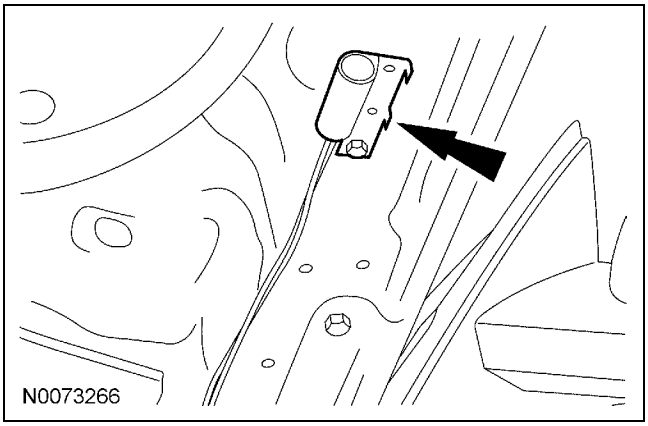
    NOTE: Using a piece of convolute adds in the appearance of the installation.

    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

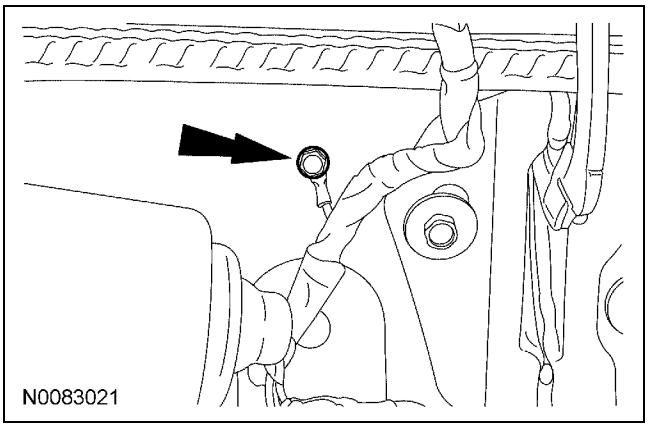
    Locate an easy to access area near the driver side hood hinge and install the hood safety switch using the supplied metal screws.

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



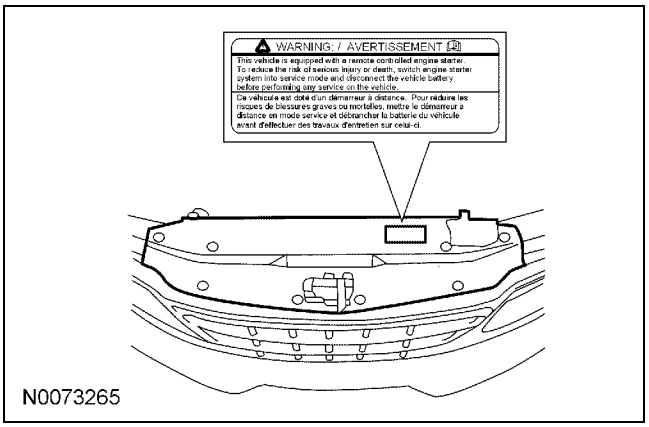
INSTALLATION (Continued)

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



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

    Install the underhood warning label



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

67. 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.

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

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

Power Connection

70. **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.

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

Program The RKE/VSS/RMST System

72. Refer to the control module programming section for this vehicle (click here).

Secure The Control Module Harness and Control Module

73. Use the supplied tie wraps to secure the control module harness wires.

74. **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

75. Install the right hand scuff plate, cowl trim panel and fuse door panel.

76. Assemble the upper and lower steering column shrouds, and install the 3 lower shroud screws.

77. Install the steering column opening trim panel reinforcement.

    Install the 4 bolts.

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

78. Install the lower instrument panel steering column cover and screws.

INSTALLATION (Continued)

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

GENERAL PROCEDURES

Programming

Programming the Module

1. **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

2. 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.

3. Open the driver door.

   All other doors should remain closed.

4. Turn the ignition key to the RUN position.

5. Press and hold the remote start system override button for at least 10 seconds.

   After 10 seconds the horn with honk 3 times, indicating the system is now in the learn mode.

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.

GENERAL PROCEDURES (Continued)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

NOTE: The remote start module is now programmed.

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

Programming the SECURILOCK

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

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

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

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

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

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

GENERAL PROCEDURES (Continued)

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

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

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

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

GENERAL PROCEDURES

Functional Test

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

NOTE: For remote start troubleshooting guide click here.

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

Troubleshooting

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

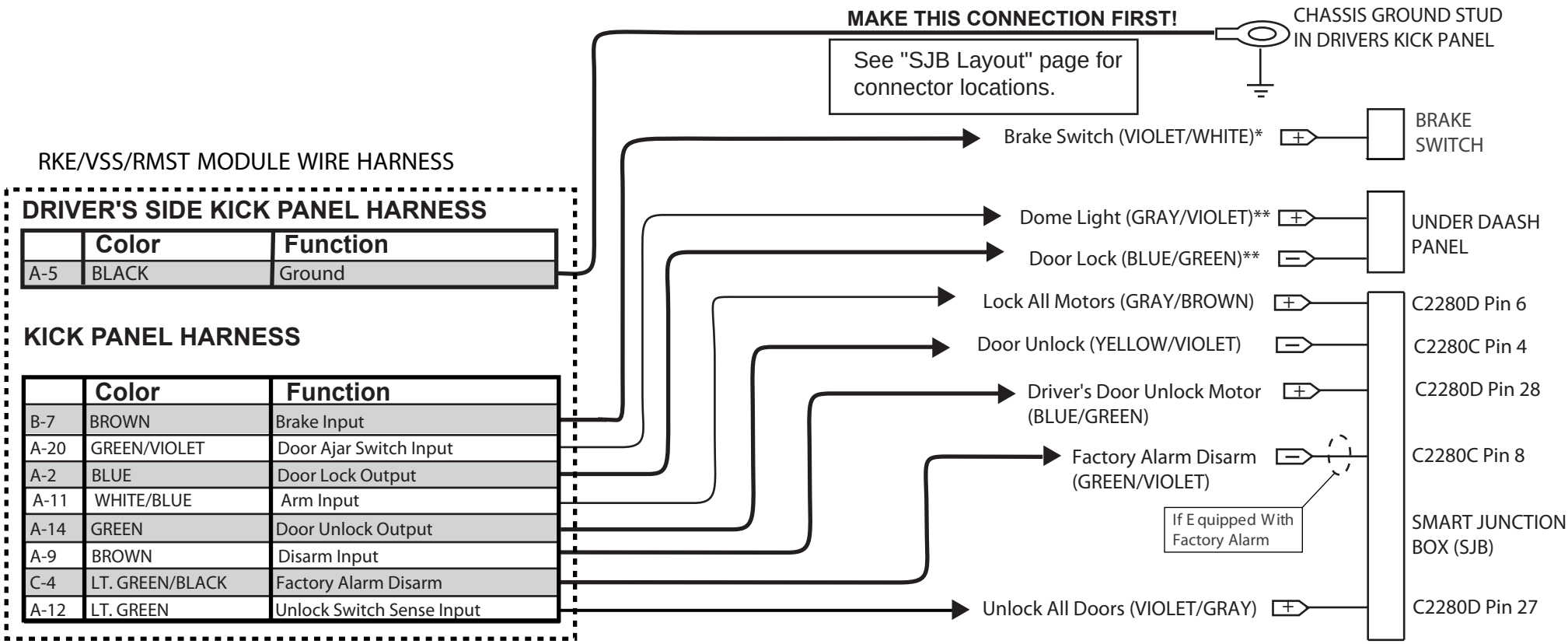
    Example: Depress the remote start fob button for 3 seconds and then release. The vehicle horn will ''chirp'' one time to indicate that RMST signal was received. If the vehicle doesn't start and the horn ''chirps'' 3 times, there is a fault - ''Vehicle Door is Open''

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

GENERAL PROCEDURES (Continued)

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

‘10 Mustang



	Color	Function
A-5	BLACK	Ground

	Color	Function
B-7	BROWN	Brake Input
A-20	GREEN/VIOLET	Door Ajar Switch Input
A-2	BLUE	Door Lock Output
A-11	WHITE/BLUE	Arm Input
A-14	GREEN	Door Unlock Output
A-9	BROWN	Disarm Input
C-4	LT. GREEN/BLACK	Factory Alarm Disarm
A-12	LT. GREEN	Unlock Switch Sense Input

*Wire is located inside wire convolute running to connector C260 but doesnot terminate. Wire can be found within 2-6" from connector on the side heading toward the rear of the vehicle in a looped fashion underneath bright green tape.

**Wire is located inside wire loom running to connector C260 but doesnot terminate. Wire can be found 4" from connector on the side heading into main IP harness in a looped fashion underneath bright green tape.

‘10 Mustang

RKE/VSS/RMST MODULE WIRE HARNESS

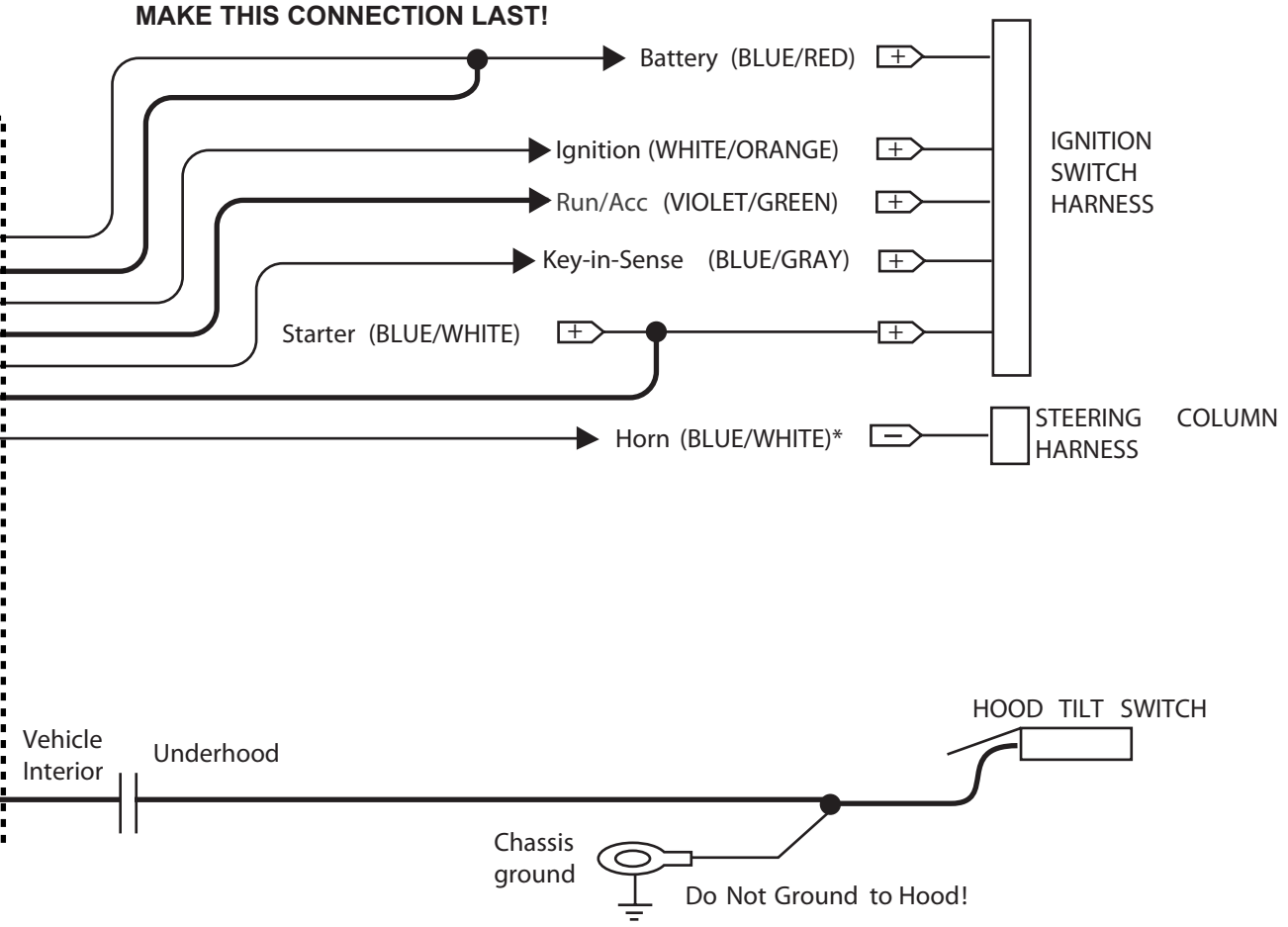
MAKE THIS CONNECTION LAST!

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

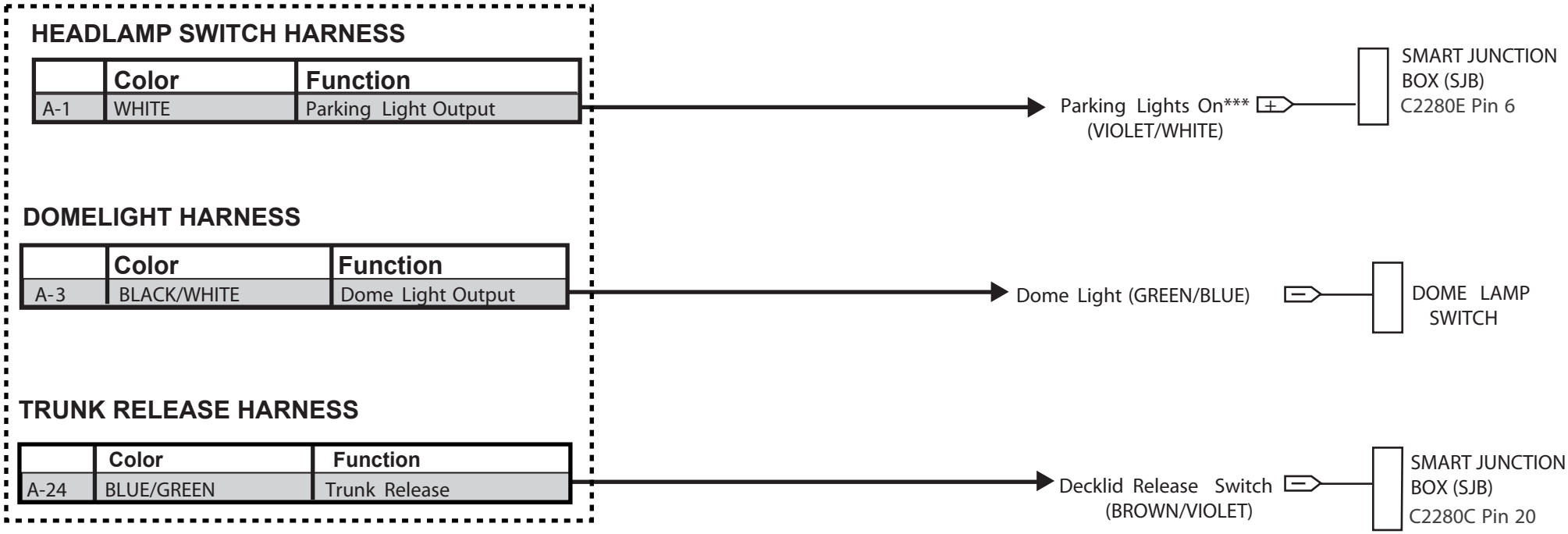
UNDERHOOD HARNESS

	Color	Function
A-19	GRAY	Hood Open Switch Input



*Wire is located inside wire convolute running to connector C260 but doesnot terminate. Wire can be found within 2-6" from connector on the side heading into main IP harness in a looped fashion underneath bright green tape.

RKE/VSS/RMST MODULE WIRE HARNESS



*** Post-J1 Running Change: Wire is located inside wire loom running to connector C260 but doesnot terminate. Wire can be found 4" from connector on the side heading toward the bulkhead of the vehicle in a looped fashion underneath bright green tape.

OPTIONAL CONNECTIONS / FEATURES

OPTION PROGRAMMING REQUIREMENTS

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

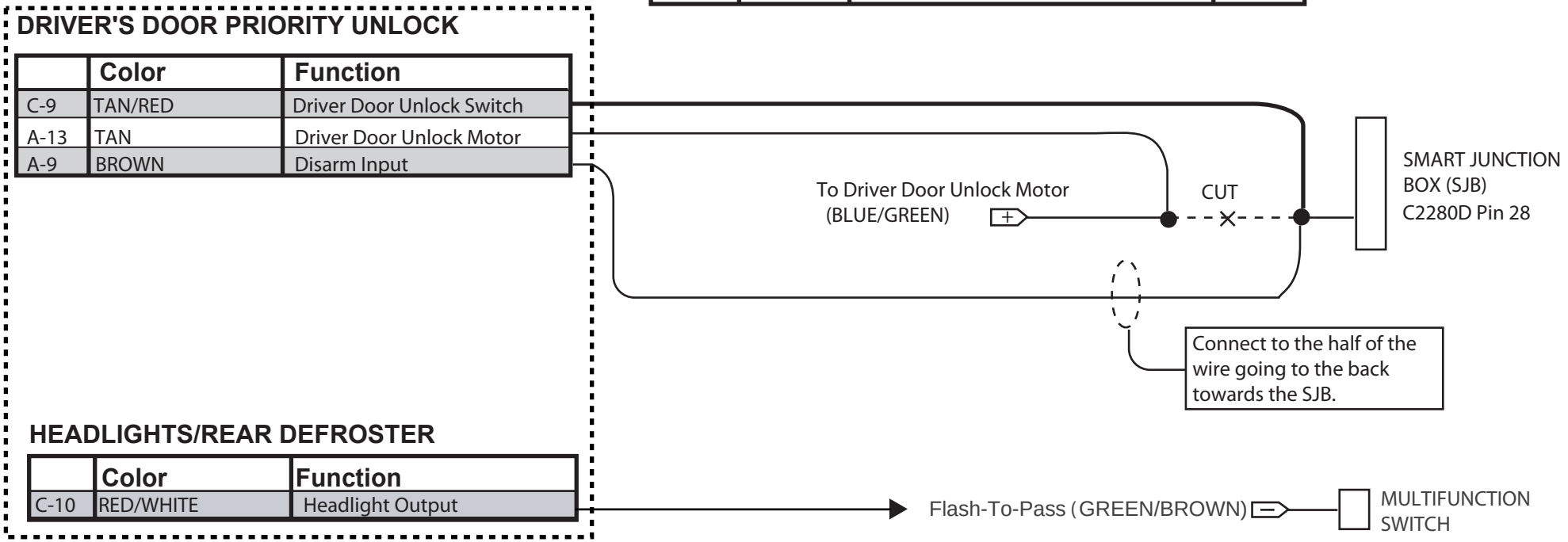
RKE/VSS/RMST MODULE WIRE HARNESS

DRIVER'S DOOR PRIORITY UNLOCK

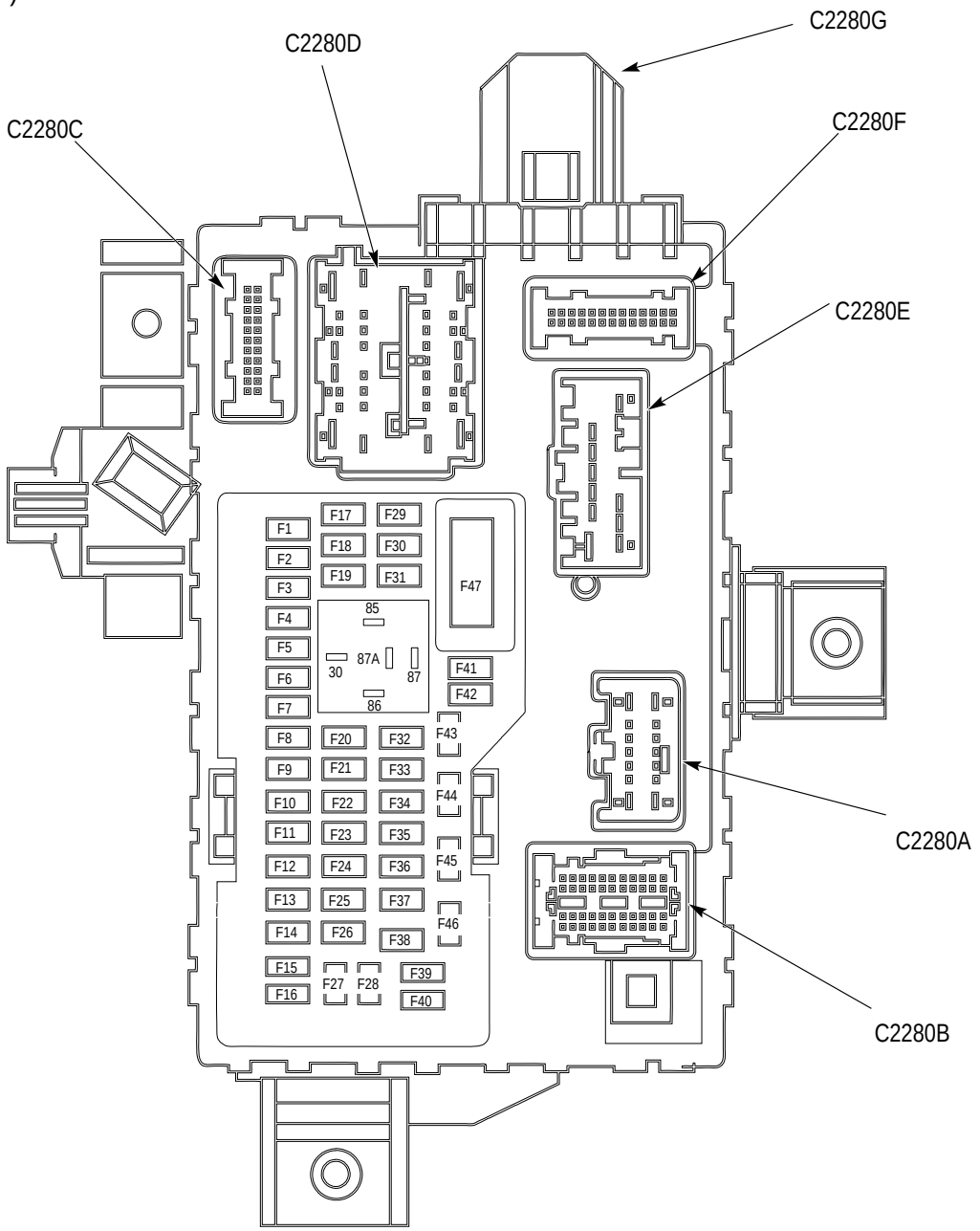
	Color	Function
C-9	TAN/RED	Driver Door Unlock Switch
A-13	TAN	Driver Door Unlock Motor
A-9	BROWN	Disarm Input

HEADLIGHTS/REAR DEFROSTER

	Color	Function
C-10	RED/WHITE	Headlight Output



SMART JUNCTION BOX (SJB)



Manual Table of Contents

RKE/VSS/REMOTE START SYSTEM INSTALLATION

CONTENTS

INSTALLATION

Remote Start

Towncar

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

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

1. Verify correct kit number.

Review RKE/VSS/RMST Installation Kit Contents

NOTE: Kits are vehicle specific and are not interchangeable.

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

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

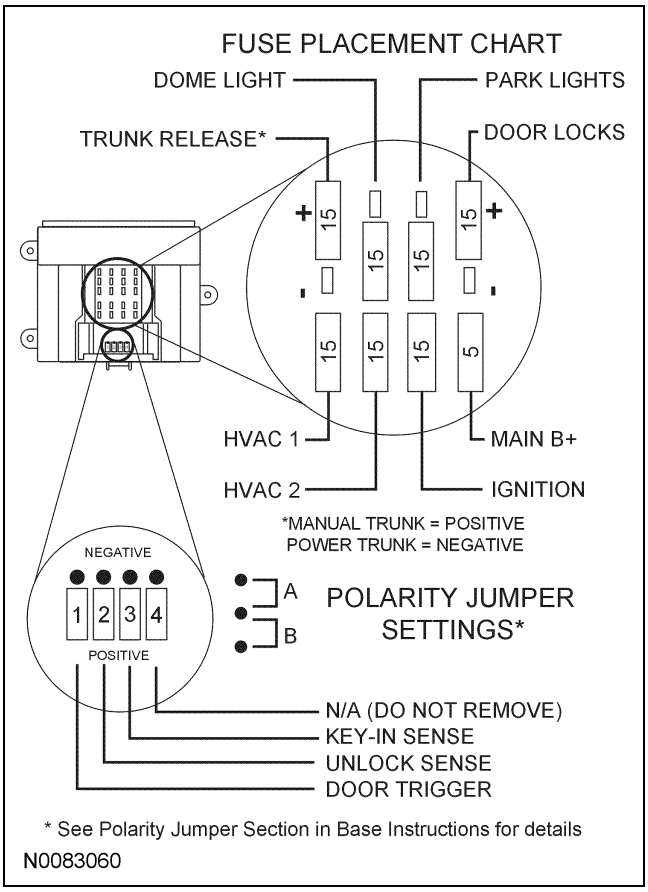
QUANTITY	DESCRIPTION
1	MODULE ASSEMBLY
1	RKE/VSS/RMST SOFTWARE CARTRIDGE ASSEMBLY
2	6 BUTTON POWERCODE TRANSMITTER
1	WIRING HARNESS ASSEMBLIES
1	DIPOLE ANTENNA
1	HOOD SAFETY SWITCH ASSEMBLY
1	INSTALLATION PARTS BAG
1	FUSE PARTS BAG
1	OPERATORS INSTRUCTIONS
1	OPERATORS QUICK REFERENCE WALLET CARD

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

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

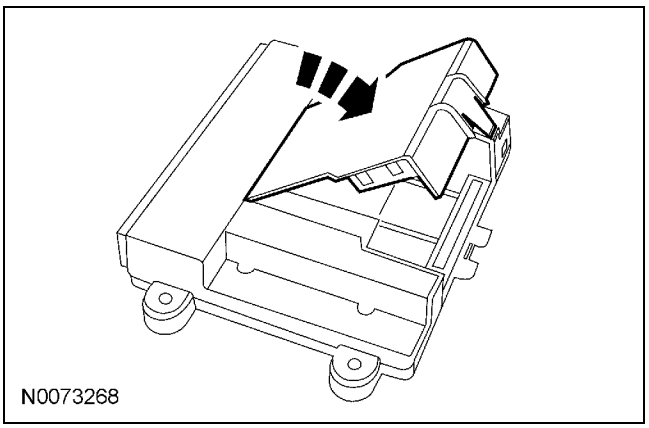
Module Preparation

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

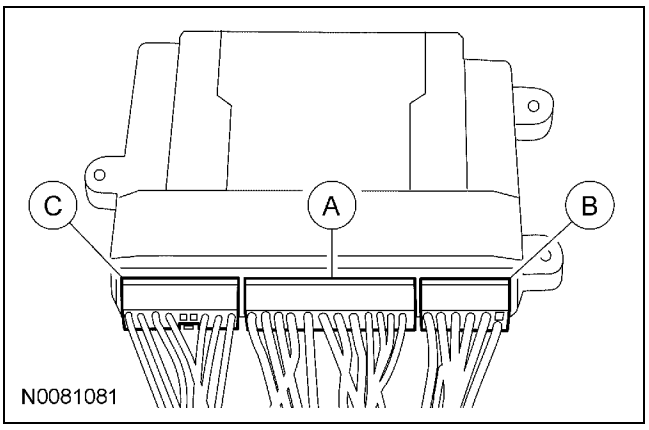


4. Place the software cartridge onto the RKE/VSS/RMST control module.

INSTALLATION (Continued)



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



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

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

   Connect 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. **NOTE:** Skip this step if Optional/Features - Headlight Illumination is installed.

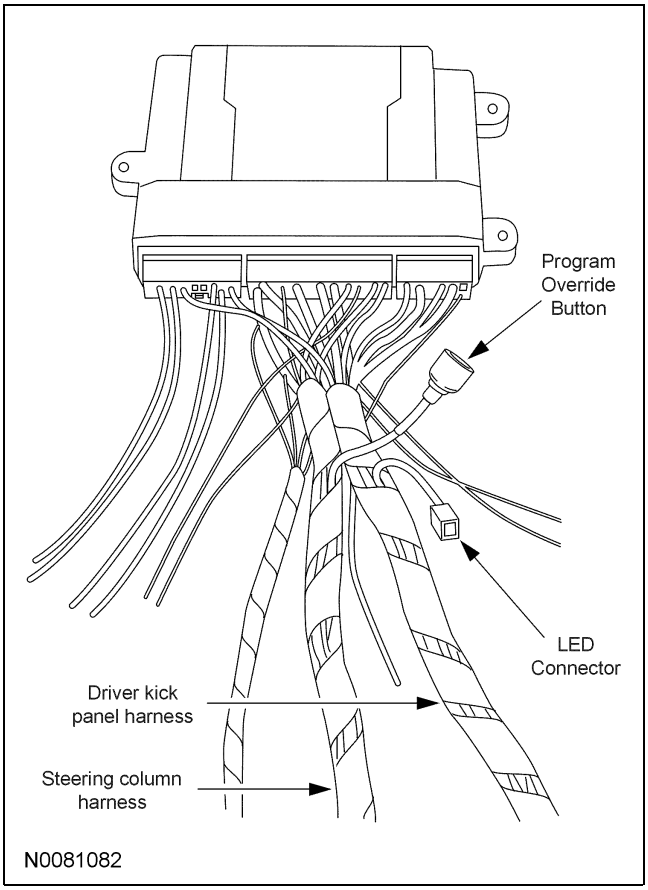
   Cut and tape off the following wires.
   - C-10 Red/White wire in the C connector.

8. **NOTE:** Skip this step if Optional/Features - Rear Defroster activation is installed.

   Cut and tape off the following wires.
   - C-11 Blue/White wire in the C connector.

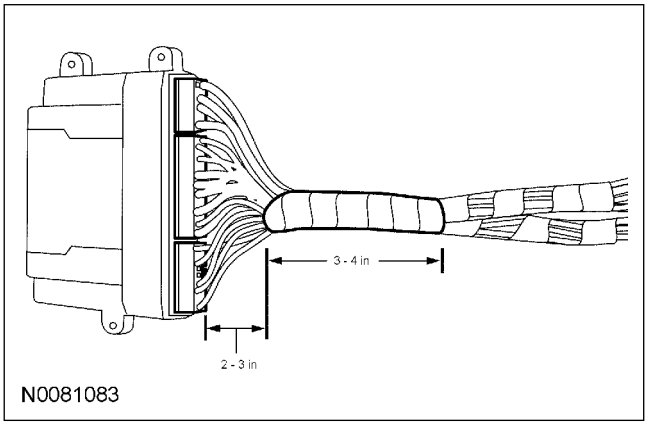
9. Referring to the vehicle specific wiring section for the system being installed, gather all individual wires that will be routed to the same areas of the vehicle into groups. Cover each wire group with electrical tape for approximately 18''. Depending on the vehicle, there will be 2 to 5 different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

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



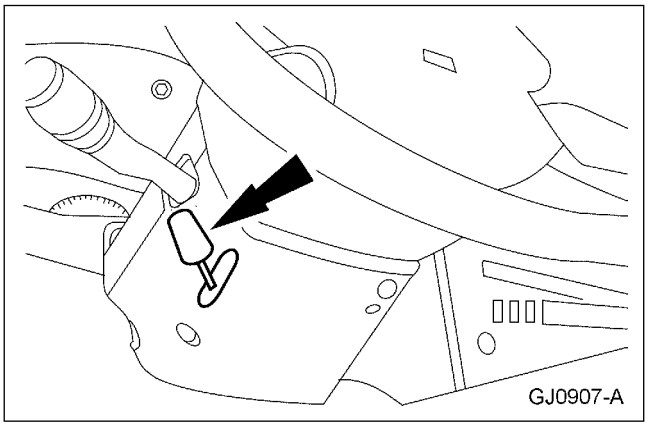
10. Tape the harness sections together, making sure to cover all of the unused wires.

INSTALLATION (Continued)



Vehicle Preparation

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



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

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 window control switch plate and position aside.

15. Disconnect the 4 electrical connectors and remove the switch plate.

16. ***NOTICE:*** **Use care not to damage the trim panel covers.**

    Remove the 2 assist handle screw covers and the door handle cup screw cover.

17. Remove the 2 assist handle screws and door handle cup screw.

18. Remove the 3 front door trim panel screws.

19. Disconnect the 3 electrical connectors and remove the front door 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.

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

Install The Dipole Antenna

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

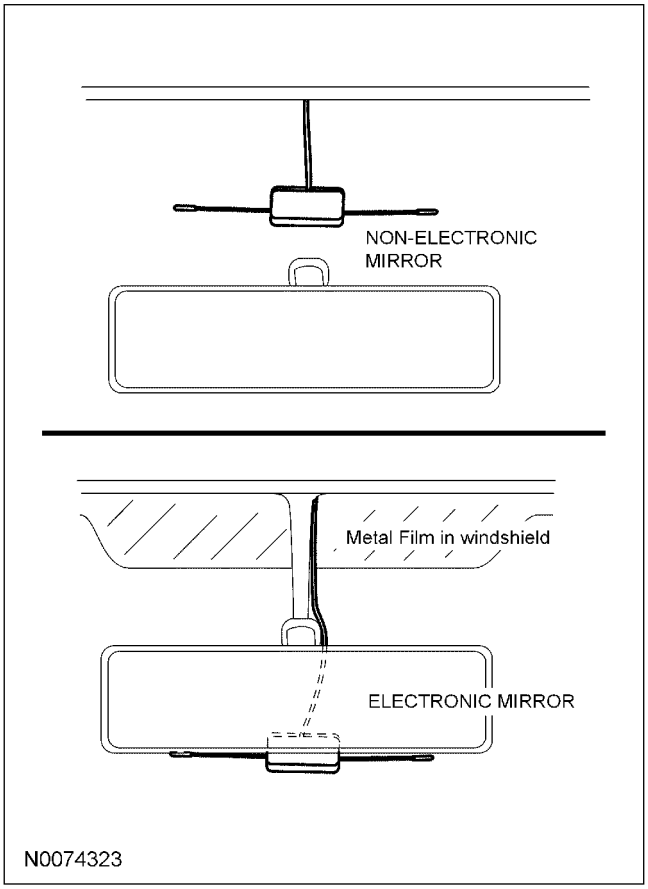
22. **NOTE:** Do not touch the adhesive, reduced adhesion may result.

    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.

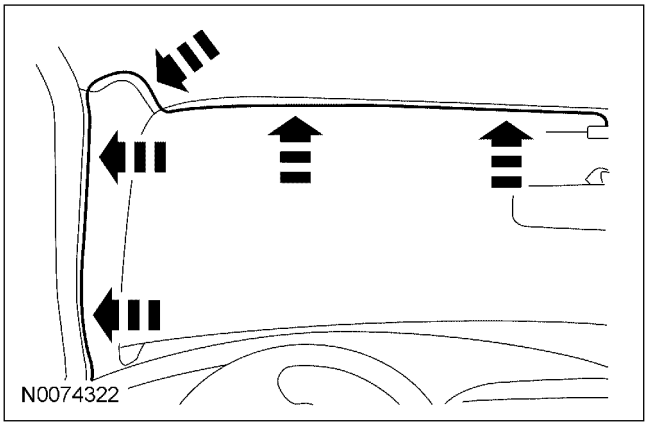
    NOTE: The wire will be attached to the control module later in this procedure.

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

INSTALLATION (Continued)

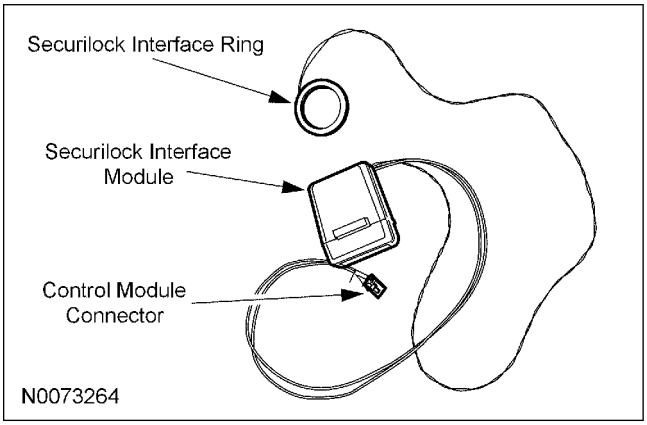


23. Route the dipole antenna cable along the headliner and down the A pillar toward the floor. The wire can be tucked behind the headliner without removing or loosening any of the trim panels.

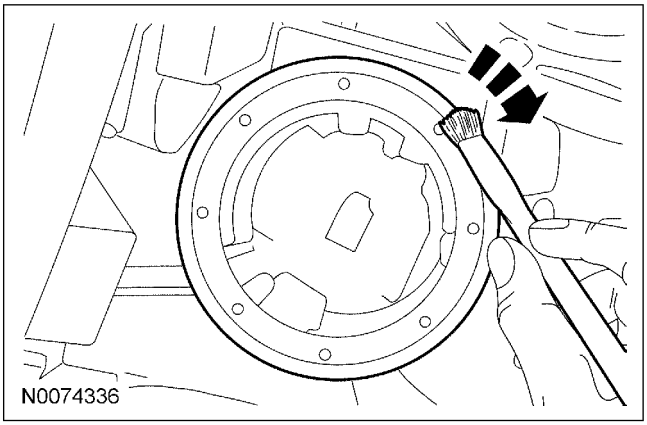


Install The Securilock Interface Kit

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



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

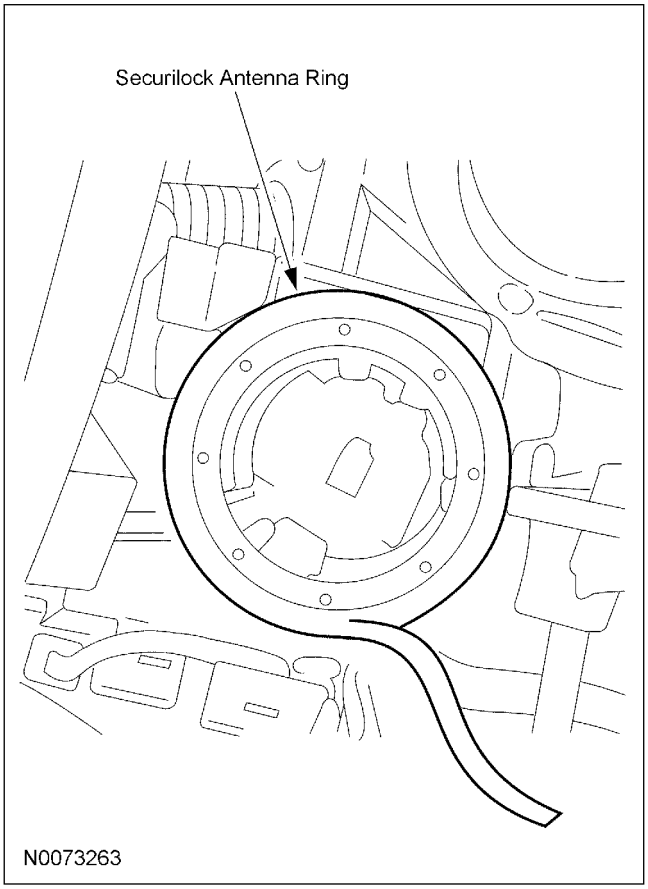


26. ***NOTICE:*** **Do not damage the transceiver ring during installation or while installing the steering column shrouds.**

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

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

INSTALLATION (Continued)



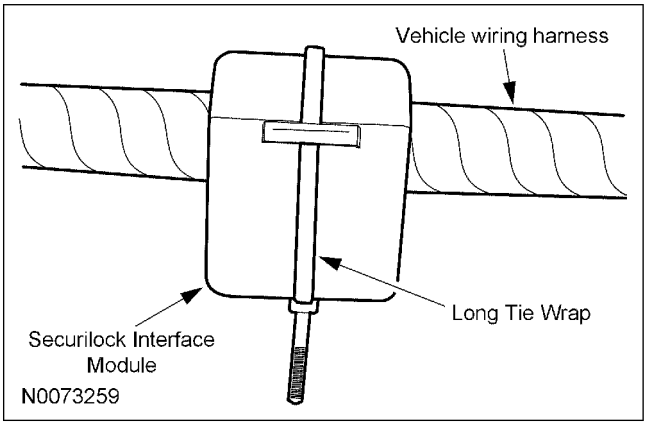
Install The Securilock Interface Module

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

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

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

    Route the harness and connector to the module mounting location.



Install the Remote Start Control Module and Harness Assembly

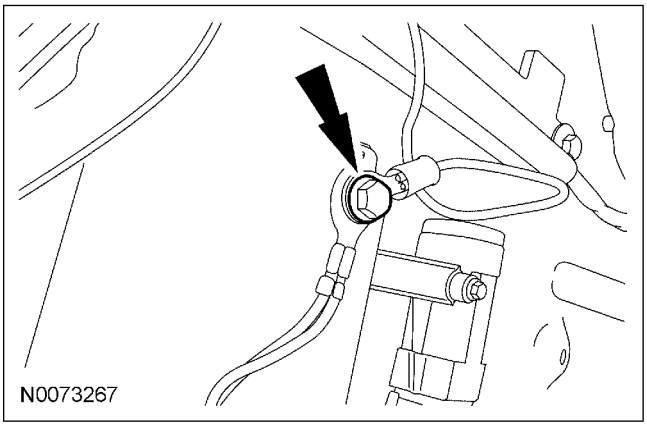
29. Place the remote start module and harness assembly in the vehicle.

Identify Circuit Wires For Connections

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

NOTE: For proper wire splicing techniques click here.

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



INSTALLATION (Continued)

31. **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 Violet/Orange ignition circuit wire at the ignition switch harness.

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

33. **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 run circuit wire at the ignition switch harness.

34. Connect the Orange wire from the control module harness to the Grey/Yellow run circuit wire at the ignition switch harness.

35. **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 White/Violet run/acc circuit wire at the ignition switch harness.

36. Connect the Orange/White wire from the control module harness to the White/Violet run/acc circuit wire at the ignition switch harness.

37. **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 Dark Green starter circuit wire at the ignition switch harness.

38. Connect the Violet wire from the control module harness to the Dark/Green starter circuit wire at the ignition switch harness.

39. **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 Grey/Yellow Key-in-sense circuit wire at the ignition switch harness.

40. Connect the Black/White wire from the control module harness to the Grey/Yellow Key-in-sense circuit wire at the ignition switch harness.

41. **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.

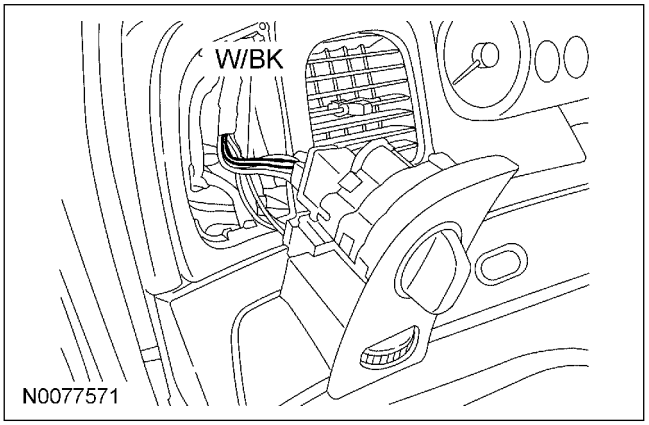
42. Connect the Brown/Black wire from the remote start module harness to the Dark Blue horn circuit wire in the steering column harness.

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

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

    Identify the White/Black parking lights on circuit wire at the Headlight Switch.

INSTALLATION (Continued)



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

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

    NOTE: A logic probe connected to the correct wire will show ground with the vehicle door(s) open and the dome light ON, then show open 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/White dome light output circuit wire at the dimmer switch. location.

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

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

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

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

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

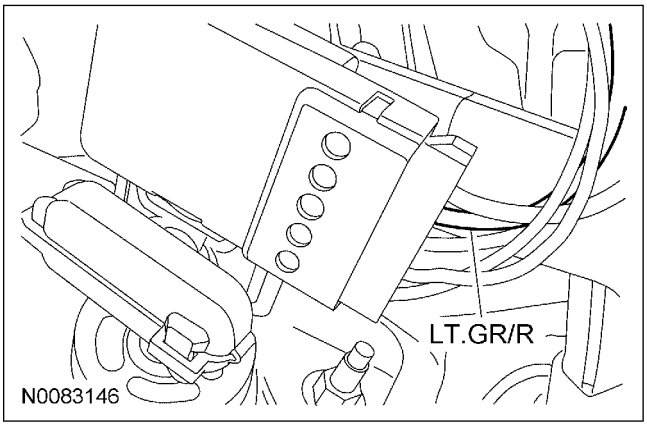
    Identify the Black/Light Blue dome light circuit wire at the under dash light location.

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

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

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

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



50. Connect the Brown wire from the control module harness to the Light Green/Red brake switch circuit wire at the brake switch.

INSTALLATION (Continued)

51. **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 power door unlock motor circuit wire at the Driver Door Module (DDM) in the driver door.

52. Connect the Brown wire from the control module harness to the Red/Orange power door unlock motor circuit wire at the DDM in the driver door.

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

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

    Identify the Pink/Black power door lock motor circuit wire at the DDM in the driver door.

54. Connect the White/Blue wire from the control module harness to the Pink/Black power door lock motor circuit wire at the DDM in the driver door.

55. **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/Light Green door unlock circuit wire at the DDM in the driver door.

56. Connect the Green wire from the control module harness to the Pink/Light Green door unlock circuit wire at the DDM in the driver door.

57. **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/Yellow door lock circuit wire at the DDM in the driver door.

58. Connect the Blue wire from the control module harness to the Pink/Yellow door lock circuit wire at the DDM in the driver door.

59. **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 open on the correct wire, then show ground when the factory disarm switch is activated.

    Identify the Dark Green/Violet factory disarm circuit wire in the harness above the gas pedal.

60. Connect the Light Green/Black wire from the control module harness to the Dark Green/Violet factory disarm circuit wire in the harness above the gas pedal.

Vehicle w/o Power Trunk Open/Close

61. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V while depressing the trunk release switch.

    A logic probe will show open on the correct wire, then show power while depressing the trunk release switch.

    Identify the White/Violet trunk release circuit wire at the DDM C501a Pin 12 in the driver door.

62. Connect the Blue/Green wire from the control module harness to the White/Violet trunk release circuit wire at the DDM C501a Pin 12 in the driver door.

INSTALLATION (Continued)

Vehicle with Power Trunk Open/Close

63. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V while depressing the trunk release switch.

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

    Identify the Light Green/Red trunk release circuit wire at the DDM C501b Pin 21 in the driver door.

64. Connect the Tan wire from the control module harness to the Light Green/Red trunk release circuit wire at the DDM C501b Pin 21 in the driver door.

Optional Connections/Features - Driver Door Unlock

65. Prepare the relay harness.
    - Connect the circuit 87 Yellow wire to the circuit 86 Black wire.

66. **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 Red/Orange driver door unlock motor circuit wire at the driver door lock solenoid.

67. Cut the Red/Orange driver door unlock motor circuit wire at the driver door lock solenoid.

68. Connect the following wires to the cut Red/Orange driver door unlock motor circuit wire at the driver door going to back toward the driver door lock solenoid.
    - Circuit 87a Red wire from the relay.
    - **NOTE:** With factory RKE only

      Brown wire from the control module.

69. Connect the circuit 30 Blue wire from the relay to the remaining cut Red/Orange driver door unlock motor circuit wire going toward the DDM.

70. Connect the circuit 85 White wire from the relay harness to the Blue/Green wire from the control module harness.

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

    A logic probe will show power with the ignition key in any position.

    Identify the White/Light Blue battery circuit wire at the DDM C501b Pin 10 or 11.

72. Connect the Red wire from the relay harness to the White/Light Blue battery circuit wire at the DDM C501b Pin 10 or 11.

Optional Connections/Features - Headlights

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

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

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

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

Optional Connections/Features - Rear Defroster Activation

75. **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 Gray/Light Blue rear defroster circuit wire at the defroster switch.

76. Connect the Blue/White wire from the control module harness to the Gray/Light Blue rear defroster circuit wire at the defroster switch.

INSTALLATION (Continued)

Optional Connections/Features - Memory Seats

NOTE: Two relays and two harnesses are required.

77. Prepare the relay harnesses.
    - 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.

78. Connect the following wires to the circuit 86 Black wire of one of the relay harnesses approximately 8 inches from the connector
    - Connect the circuit 87 Yellow wires from both relay harnesses.
    - Connect the circuit 86 Black wire from remaining relay harness.

79. **NOTE:** Relay one is for memory seat 1.

    NOTE: A DVOM connected to the correct wire will show 0V, then show 12V while depressing the memory 1 switch.

    A logic probe will show ground on the correct wire, then show power while depressing the memory 1 switch.

    Identify the Brown/Light Green memory 1 circuit wire at the DDM C501a Pin 5.

80. Connect the circuit 30 Blue wire from the relay 1 harness to the Brown/Light Green memory 1 circuit wire at the DDM C501a Pin 5.

81. Connect the Green/White wire from the control module harness to the circuit 85 White wire from the relay 1 harness.

82. **NOTE:** Relay two is for memory seat 2.

    NOTE: A DVOM connected to the correct wire will show 0V, then show 12V while depressing the memory 2 switch.

    A logic probe will show ground on the correct wire, then show power while depressing the memory 2 switch.

    Identify the Black/Orange memory 2 circuit wire at the DDM C501a Pin 6.

83. Connect the circuit 30 Blue wire from the relay 2 harness to the Black/Orange memory 2 circuit wire at the DDM C501a Pin 6.

84. Connect the Yellow/Green wire from the control module harness to the circuit 85 White wire from the relay 2 harness.

85. **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 White/Light Blue battery circuit wire at the DDM C501b Pin 10 or 11.

86. Connect the circuit 86 Black wire from both relays to the White/Light Blue battery circuit wire at the DDM C501b Pin 10 or 11.

Install The Hood Safety Switch

87. **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.

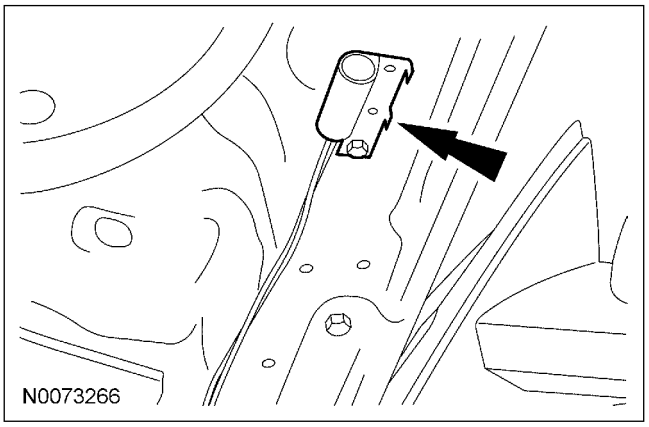
    Failure to position the switch properly could result in one of the following:

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

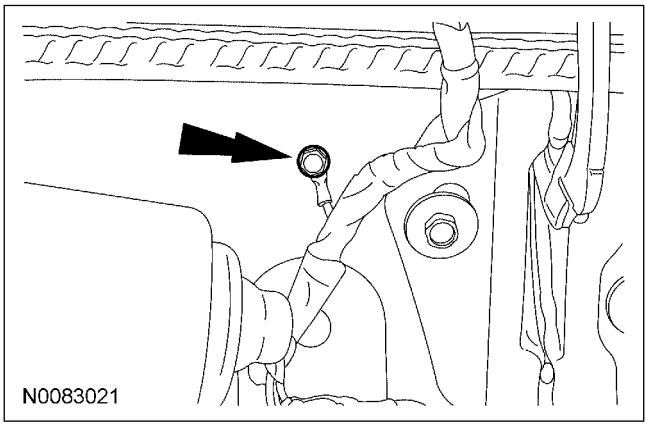
    Locate an easy to access area near the drivers side hood hinge and install the hood safety switch using the supplied metal screws.

INSTALLATION (Continued)

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

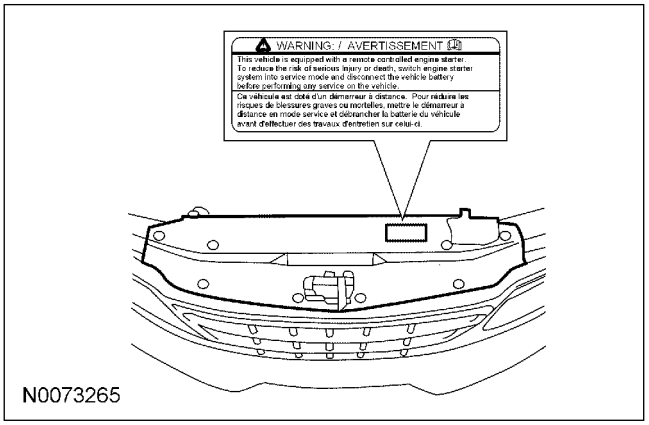


89. Connect hood switch ground wire to a suitable location on the bulkhead.



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

    Install the underhood warning label



91. 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.

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

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

Power Connection

94. **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 harness.

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

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

Program The RKE/VSS/RMST System

97. Refer to the RMST programming section for this vehicle click here.

Secure RKE/VSS/RMST Harness and Control Module

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

99. **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)

Install Trim

100. Connect the 3 electrical connectors and install the driver door trim panel.
    - Install the 3 front door trim panel screws.
101. Install the 2 assist handle screws and door handle cup screw.
    - Install the 2 assist handle screw covers and door handle cup screw cover.
102. Connect the 4 electrical connectors and install the window control switch plate.
103. Install the left hand scuff plate and cowl trim panel.
104. Install the upper and lower steering column shrouds.

     Install the 3 screws.
105. Install the steering column tilt release lever/handle.

GENERAL PROCEDURES

Programming

Programming the Module

1. **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

2. 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.

3. Open the driver door.

   All other doors should remain closed.

4. Turn the ignition key to the RUN position.

5. Press and hold the remote start system override button for at least 10 seconds.

   After 10 seconds the horn with honk 3 times, indicating the system is now in the learn mode.

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.

GENERAL PROCEDURES (Continued)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

NOTE: The remote start module is now programmed.

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

Programming the SECURILOCK

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

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

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

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

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

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

GENERAL PROCEDURES (Continued)

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

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

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

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

GENERAL PROCEDURES

Functional Test

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

NOTE: For remote start troubleshooting guide click here.

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

Troubleshooting

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

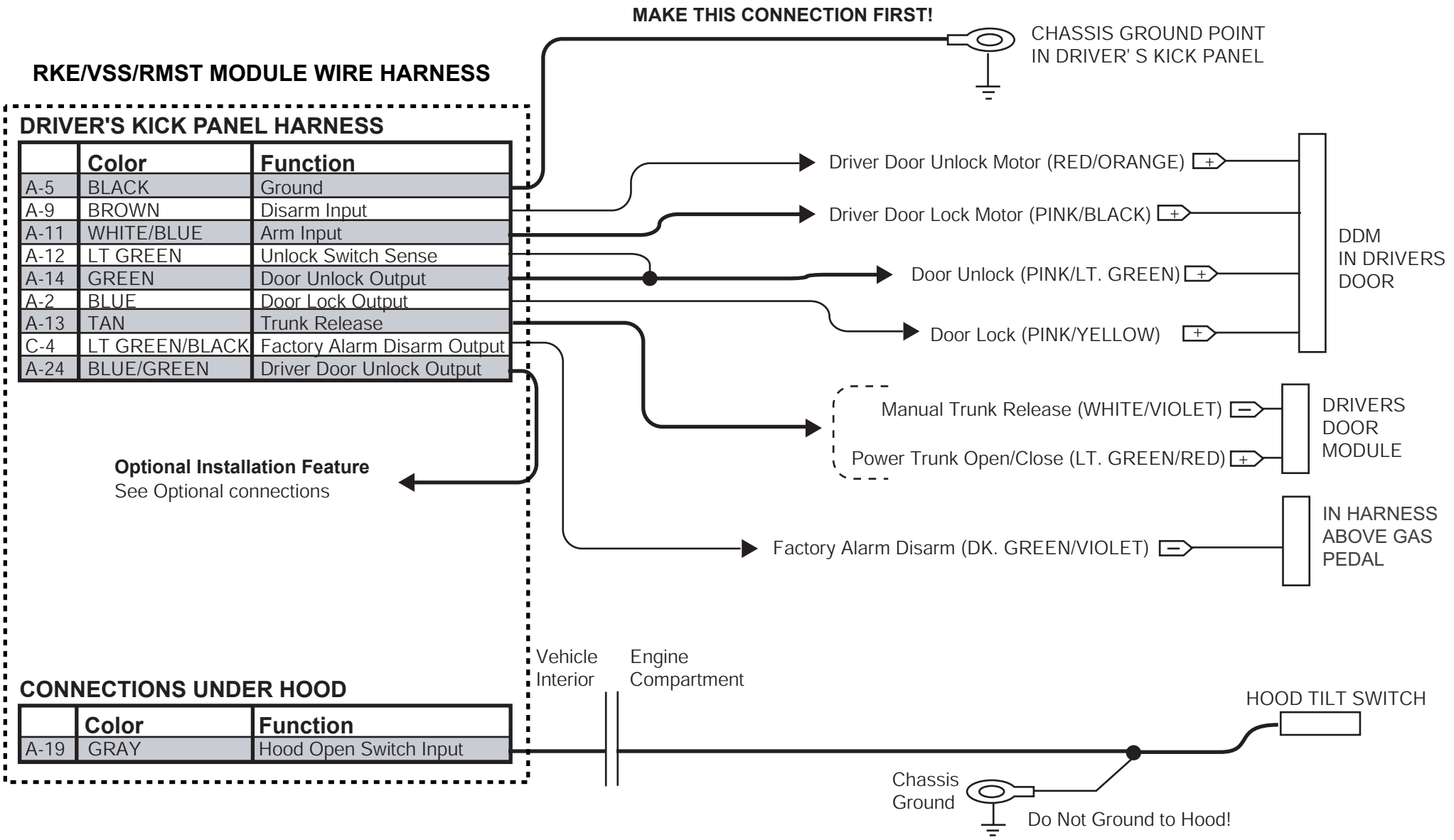
    Example: Depress the remote start fob button for 3 seconds and then release. The vehicle horn will ''chirp'' one time to indicate that RMST signal was received. If the vehicle doesn't start and the horn ''chirps'' 3 times, there is a fault - ''Vehicle Door is Open''

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

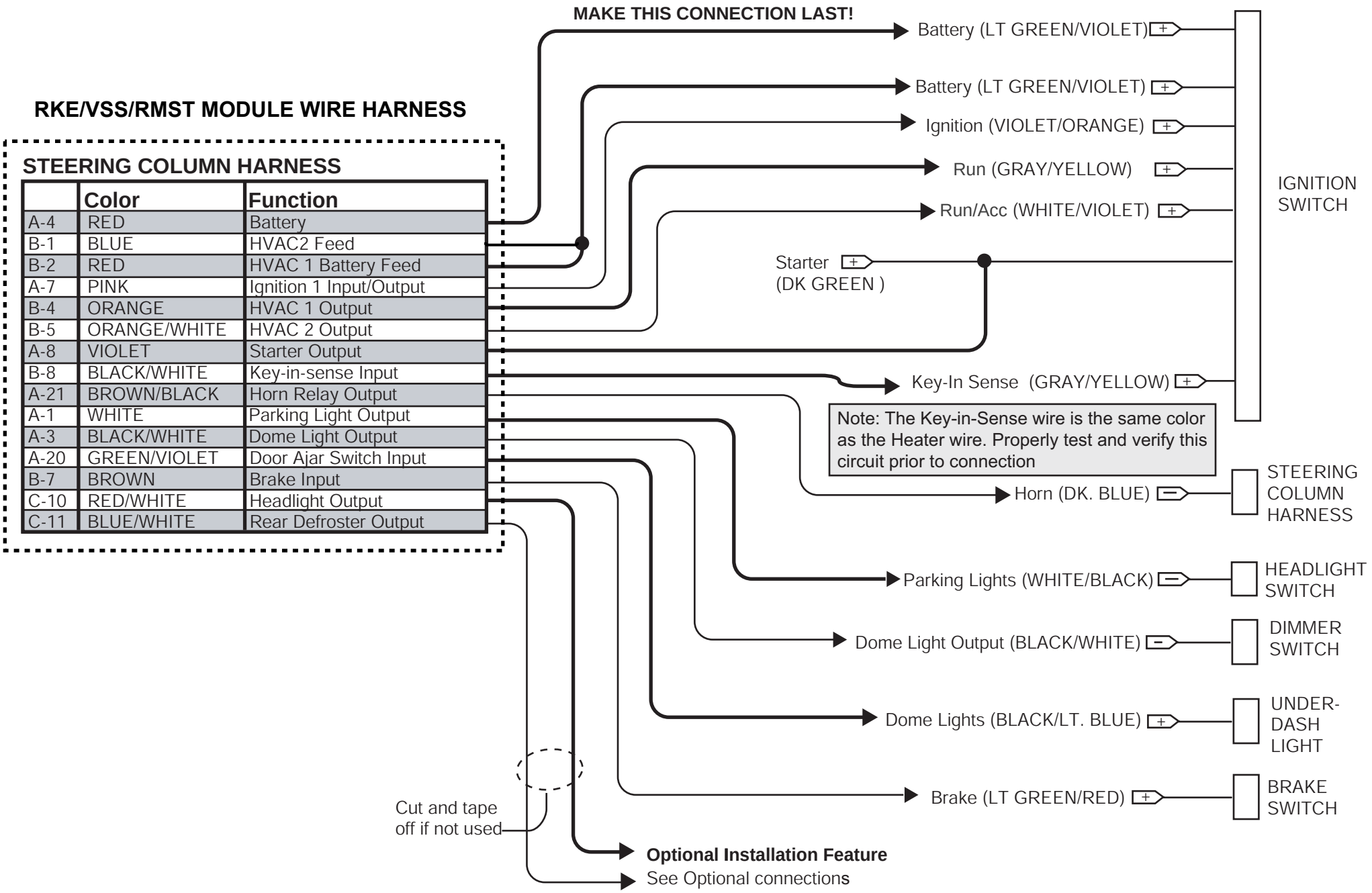
GENERAL PROCEDURES (Continued)

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

'10 Towncar


MAKE THIS CONNECTION FIRST!
CHASSIS GROUND POINT
IN DRIVER' S KICK PANEL
RKE/VSS/RMST MODULE WIRE HARNESS
DRIVER'S KICK PANEL HARNESS
Color
Function
A-5 BLACK Ground
A-9 BROWN Disarm Input
A-11 WHITE/BLUE Arm Input
A-12 LT GREEN Unlock Switch Sense
A-14 GREEN Door Unlock Output
A-2 BLUE Door Lock Output
A-13 TAN Trunk Release
C-4 LT GREEN/BLACK Factory Alarm Disarm Output
A-24 BLUE/GREEN Driver Door Unlock Output
Driver Door Unlock Motor (RED/ORANGE)
Driver Door Lock Motor (PINK/BLACK)
Door Unlock (PINK/LT. GREEN)
Door Lock (PINK/YELLOW)
DDM
IN DRIVERS
DOOR
Manual Trunk Release (WHITE/VIOLET)
Power Trunk Open/Close (LT. GREEN/RED)
DRIVERS
DOOR
MODULE
Optional Installation Feature
See Optional connections
Factory Alarm Disarm (DK. GREEN/VIOLET)
IN HARNESS
ABOVE GAS
PEDAL
Vehicle
Interior
Engine
Compartment
CONNECTIONS UNDER HOOD
Color
Function
A-19 GRAY Hood Open Switch Input
HOOD TILT SWITCH
Chassis
Ground
Do Not Ground to Hood!

'10 Towncar



	Color	Function
A-4	RED	Battery
B-1	BLUE	HVAC2 Feed
B-2	RED	HVAC 1 Battery Feed
A-7	PINK	Ignition 1 Input/Output
B-4	ORANGE	HVAC 1 Output
B-5	ORANGE/WHITE	HVAC 2 Output
A-8	VIOLET	Starter Output
B-8	BLACK/WHITE	Key-in-sense Input
A-21	BROWN/BLACK	Horn Relay Output
A-1	WHITE	Parking Light Output
A-3	BLACK/WHITE	Dome Light Output
A-20	GREEN/VIOLET	Door Ajar Switch Input
B-7	BROWN	Brake Input
C-10	RED/WHITE	Headlight Output
C-11	BLUE/WHITE	Rear Defroster Output

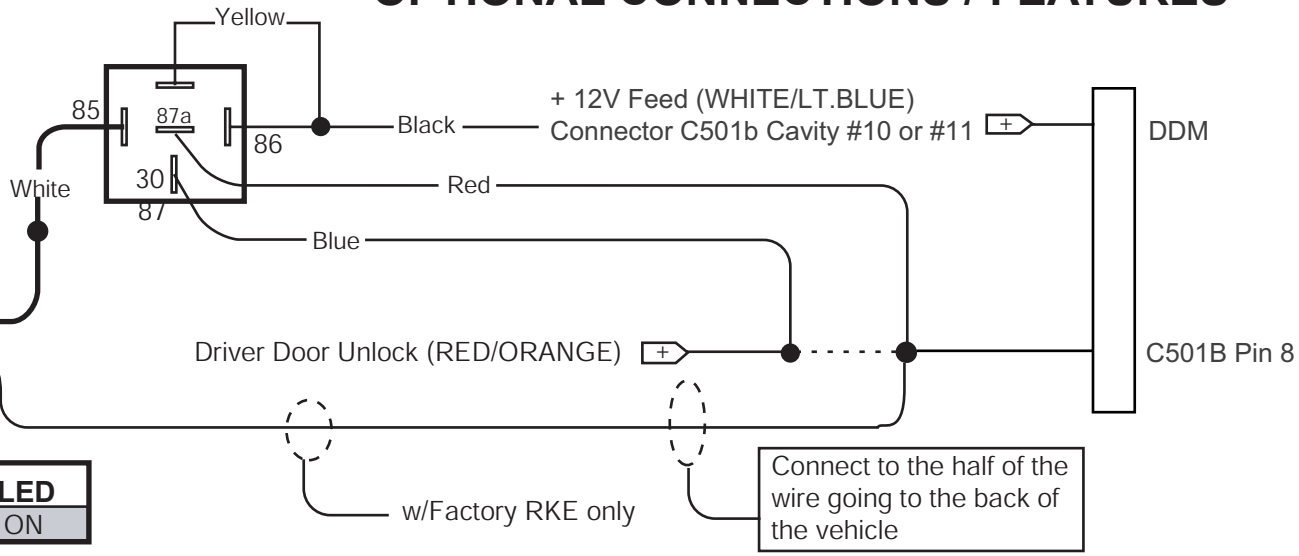
'10 Towncar

OPTIONAL CONNECTIONS / FEATURES

RKE/VSS/RMST MODULE WIRE HARNESS

DRIVER'S DOOR UNLOCK

	Color	Function
A-24	BLUE/GREEN	Driver Door Unlock Output
A-9	BROWN	Disarm Input

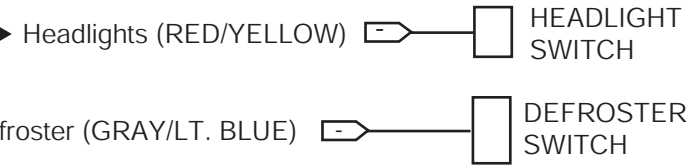


OPTION PROGRAMMING REQUIREMENTS

BANK	OPTION	DESCRIPTION	LED
3	1	DRIVER PRIORITY UNLOCK	ON

HEADLIGHTS/REAR DEFROSTER

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



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!

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).

POWER OPTIONS

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