READ ME FIRST

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

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

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

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

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

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

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

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

DO NOT CLAIM PARTS WARRANTY ON FORM 1863

Parts Warranty Processing:

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

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

   Ford Service Parts
   180 Marcus Blvd.
   Hauppauge, NY 11788

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

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

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

Splicing Procedures

NOTE:
Refer to applicable wiring diagrams for circuit information.

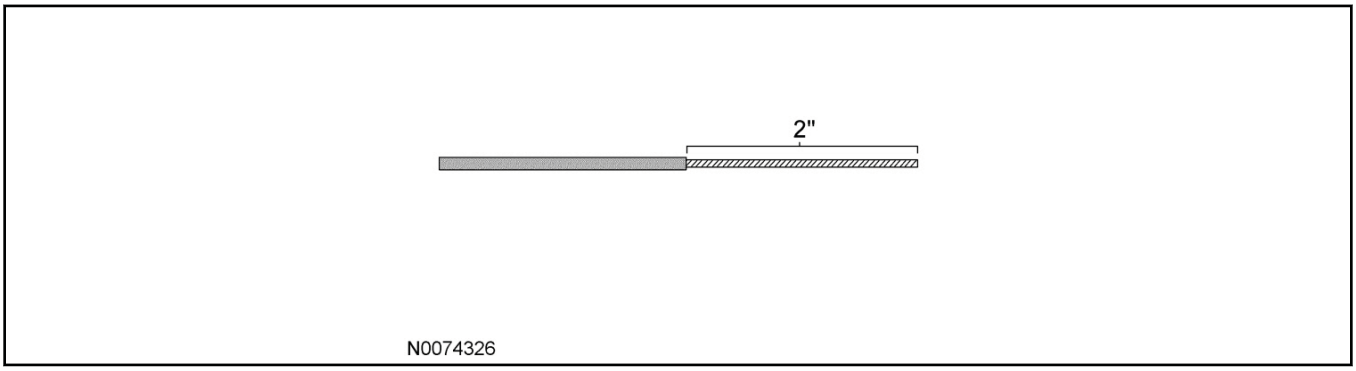
NOTE:
This procedure contains multiple splicing techniques.

NOTE:
Review splicing procedures prior to performing any cutting/soldering/splicing.

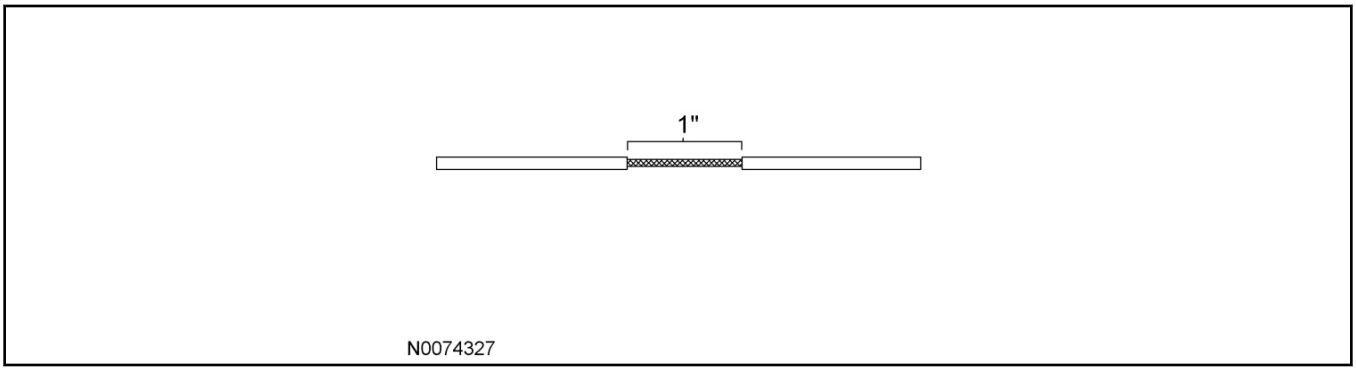
2-Wire Solder "Center Splice" With No Wire Cutting

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

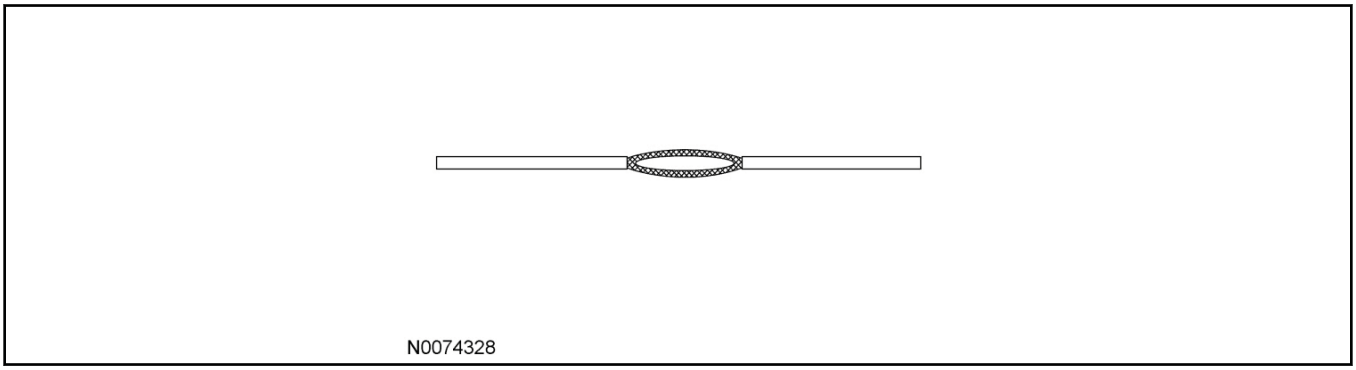
1. Strip approximately two inches of insulation from the wire to be installed in the vehicle.



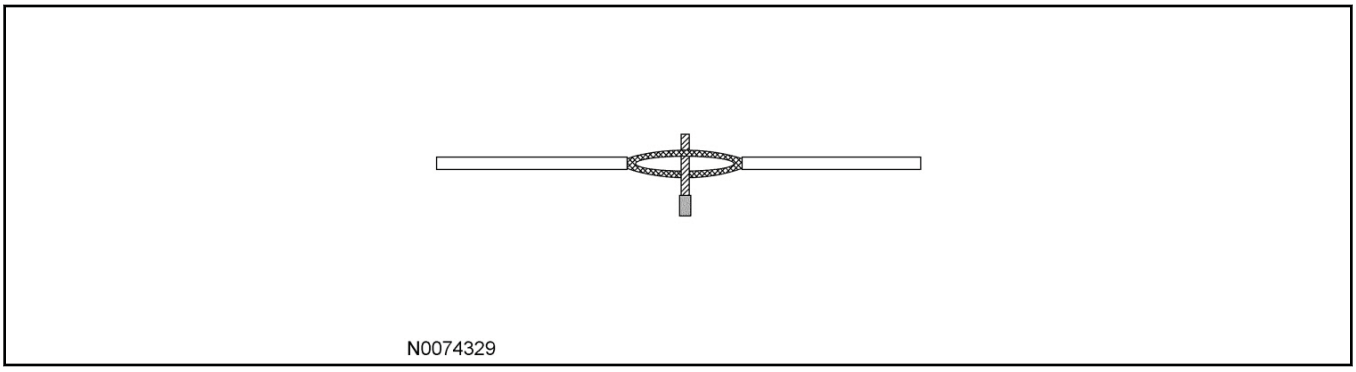
2. On the vehicle wire to be spliced into, strip one inch of insulation from the wire.



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



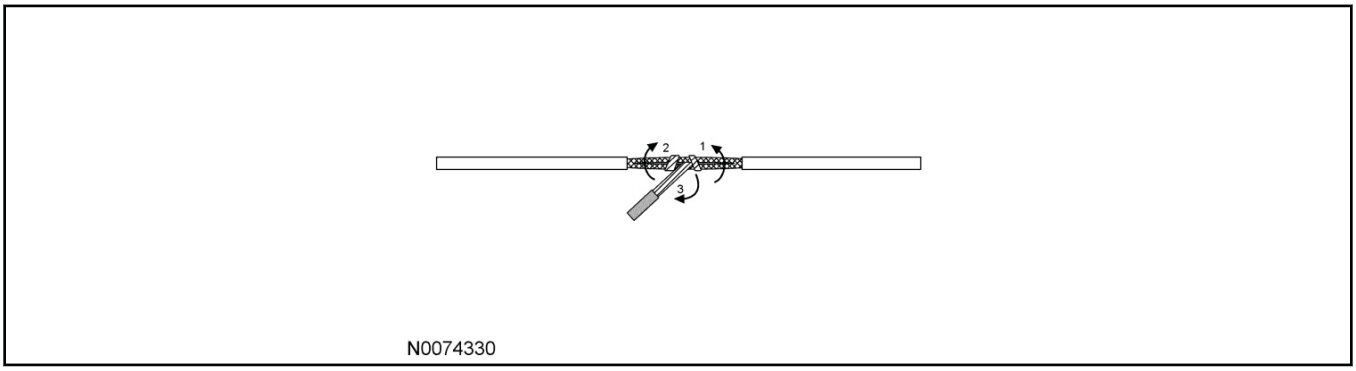
4. Insert the new wire between the parted strands. If more than one wire is being spliced, wrap them in opposite directions.



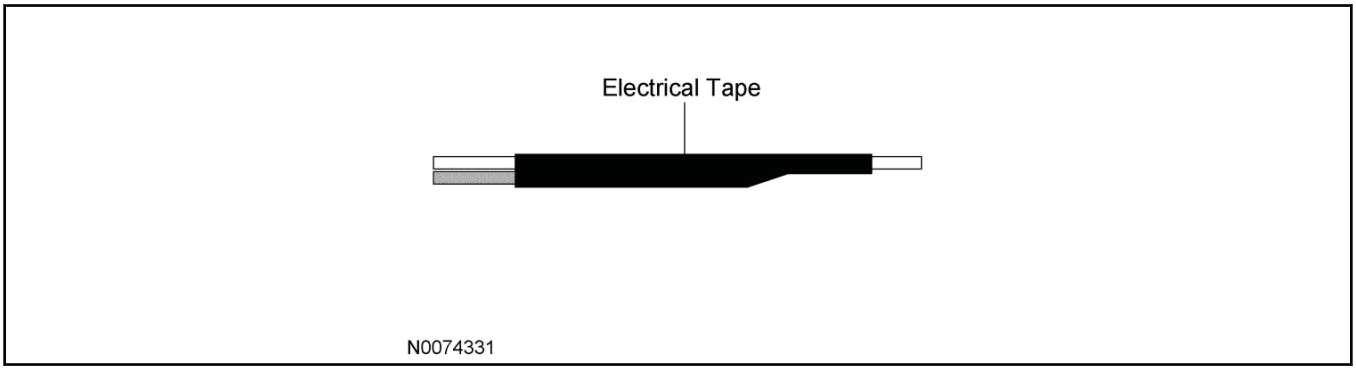
NOTE:
Use Rosin Core Mildly-Activated (RMA) Solder. Do not use Acid Core Solder.

NOTE:
Wait for solder to cool before moving wires.

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



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.



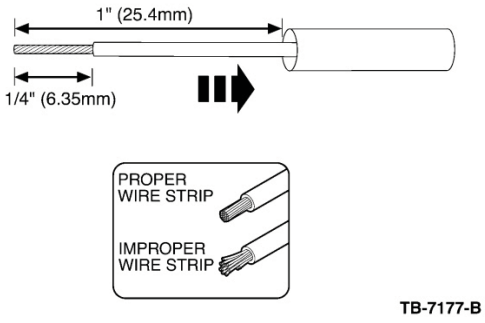
2-Wire Solder Splice/Ratcheting Crimp Tool Splice Procedure

NOTE:
For 10-14 AWG Use The following "Ratcheting Crimp Tool Splice Procedure".

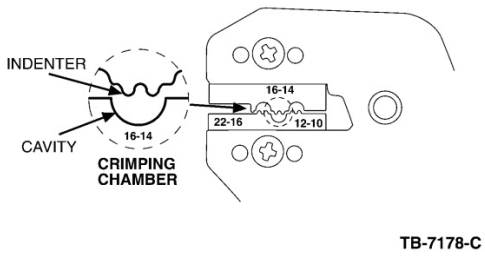
NOTE:
For Splicing Procedure Use Wire Splice Tool Kit (164-R5903).

7. **NOTE:**
   The strip length will vary depending on the butt splice and wire in harness. Longer strip lengths are required when the wire needs to be folded to mate with the butt splice. Refer to chart for strip lengths and folding techniques.

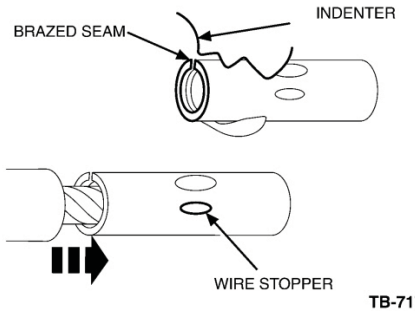
   Strip 1/4" (6.35 mm) of insulation from pigtail wire end once the wire lengths are sized so repairs can be staggered. Take care not to nick or cut wire strands. Pull wire straight from stripper. If wire is pulled at an angle, wire strands may be cut off. If more than one (1) strand is cut off during stripping, cut off the end and re-strip. Slide heat shrink tubing onto one (1) of the wire ends to be crimped, must be at least 1" (25.4mm) away from the stripped end.



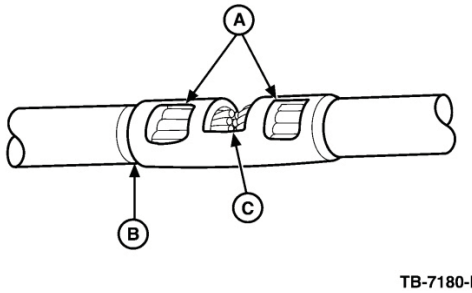
8. Identify the appropriate crimping chamber of the Rotunda 164-R5901 Pro-Crimper (or equivalent) by matching the wire size on the dies with the wire size stamped on the butt splice. Hold the crimping tool so the identified wire sizes are facing you. Squeeze tool handles together until the ratchet releases, then allow the jaws of the tool to open fully.



9. Center one (1) end of the butt splice on the appropriate crimping chamber. If visible, be sure to place the brazed seam of the butt splice toward the indenter. Hold the butt splice in place and squeeze the tool handles together until the ratchet engages sufficiently to hold the butt splice in position (typically one (1) or two (2) clicks). DO NOT deform the butt splice. Insert stripped wire into the butt splice, making sure the insulation on wire does not enter the butt splice.



10. Holding the wire in place, squeeze tool handles together until ratchet releases. Allow tool handles to open, then remove crimped butt splice.
    To crimp the other half of the splice, reposition the un-crimped wire barrel in the same crimping chamber, and repeat the crimping procedure. If splice cannot be turned for crimping the other half, turn the tool around.
    Check for acceptable crimp.
    - Crimp should be centered on each end of the butt splice. It is acceptable for crimp to be slightly off center, but not off the end of the butt splice (A).
    - Wire insulation does not enter butt splice. Wire is flush with or extends slightly beyond end of butt splice (B).
    - Wire is visible through inspection hole of splices (C).

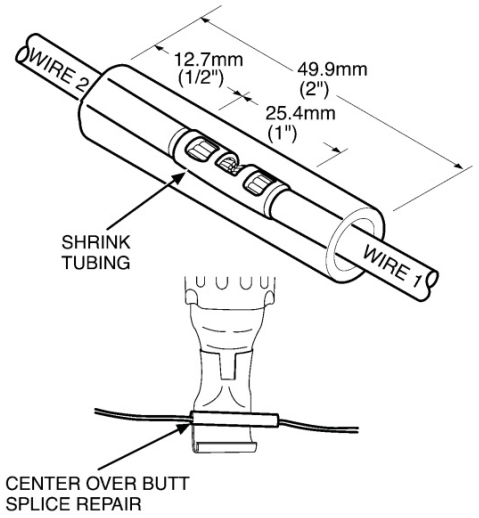


11. **NOTE:**
Overlap heat shrink tubing on both wires.

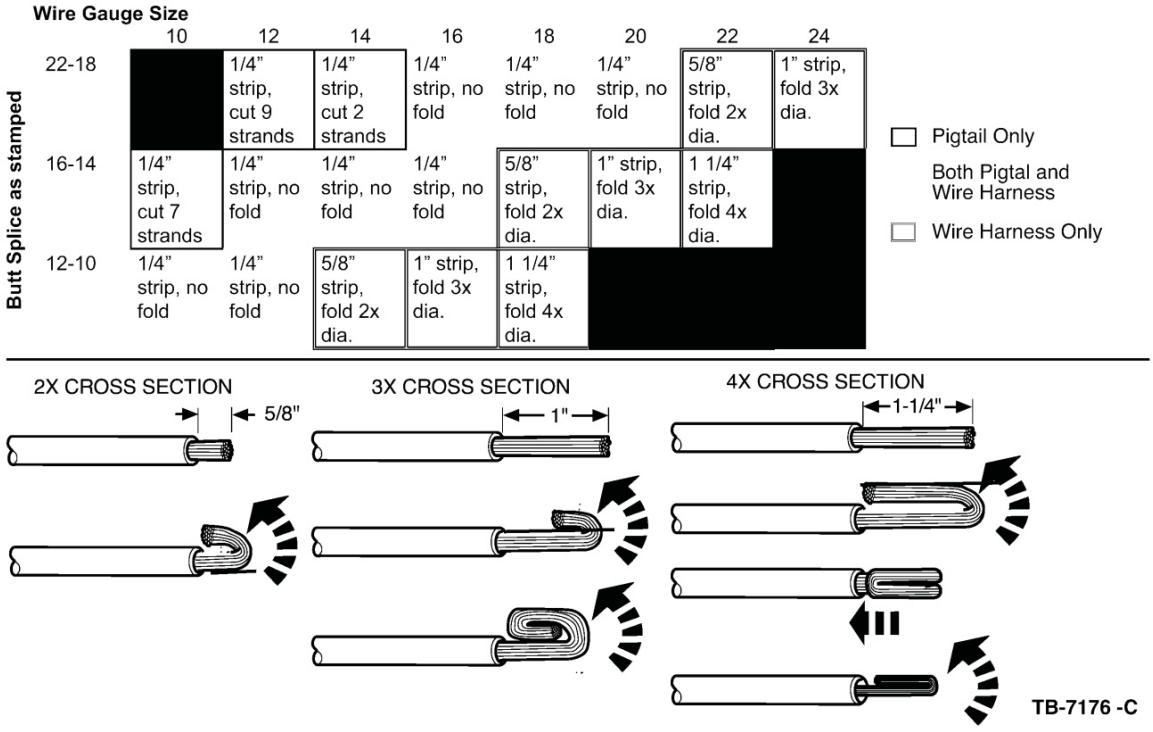
NOTE:
The hot melt forms an adhesive seal between the wire insulation and the heat shrink tubing, which prevents air and moisture from entering the solder point.

NOTE:
Durability of a heat shrink tubing splice is dependent on the hot melt that will appear from both ends of the tube.

Evenly position heat shrink tubing over wire repair. Use a shielded heat gun to heat the entire length of the heat shrink tubing until the hot melt appears from both ends of the tubing.

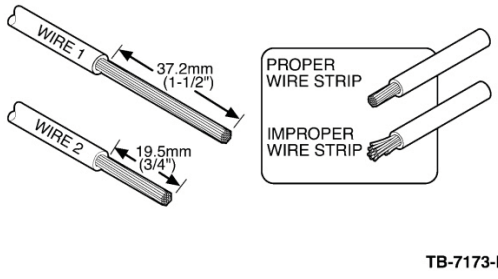


Wire Stripping Lengths and Application Techniques.



For 16-22 AWG wire use either the above "Ratcheting Crimp Procedure" or the following "2 Wire Solder Splice Procedure".

12. Strip 1 1/2" (37.2 mm) of insulation from Wire #1 and 3/4" (19.5mm) of insulation from Wire #2, taking care not to nick or cut wire strands. Pull wire straight from stripper. If wire is pulled at an angle, wire strands may be cut off during stripping. Cut off the end and re-strip.



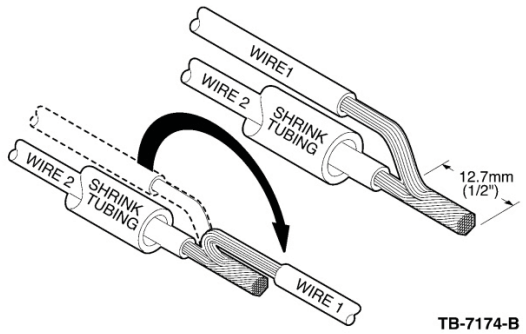
13. **NOTE:**
Use rosin core mildly activated (RMS) solder. do not use acid core solder for wire repair.

NOTE:
Overlap tubing on both wires and wait for solder to cool before moving the wires.

NOTE:
Durability of a heat shrink tubing splice is dependent on the hot melt that will appear from both ends of the tube.

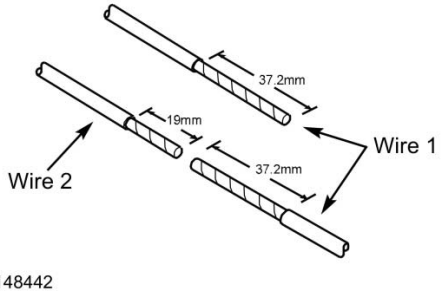
NOTE:
The hot melt forms an adhesive seal between the wire insulation and the heat shrink tubing, which prevents air and moisture from entering the solder point.

Install heat shrink tubing at least 1" (26 mm) away from one of the stripped ends being spliced. Twist the wires together. Solder wires together. Bend Wire #1 back in a straight line for sealing. Inspect solder joint bond. Evenly position heat shrink tubing over wire repair. Use a shielded heat gun to heat the entire length of the heat shrink tubing until the hot melt appears from both ends of the tubing.



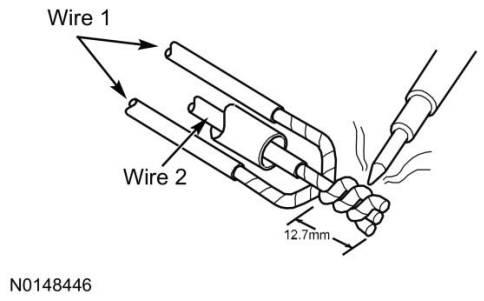
3-Wire Solder Splice Procedure

14. Strip 1 1/2" (37.2 mm) of insulation from both sides of Wire #1 and 3/4" (19 mm) of insulation from Wire #2, taking care not to nick or cut wire strands. Pull wire straight from stripper. If wire is pulled at an angle, wire strands may be cut off during stripping. Cut off the end and re-strip.

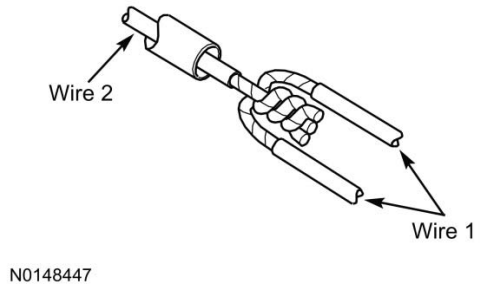


15. **NOTE:**
    Wait for solder to cool before moving wires.

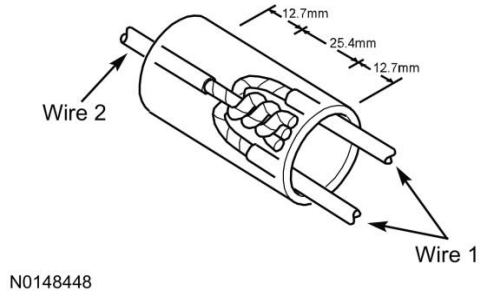
    Apply heat shrink tubing to Wire #2. Twist both ends of Wire #1 around Wire #2. Solder wires together.



16. Bend Wire #1 back over the twisted wires for sealing. Inspect solder joint bond.



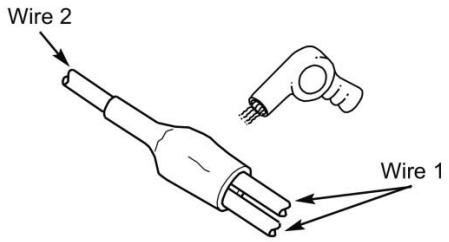
17. Evenly position heat shrink tubing over wire repair.



18. **NOTE:**
    Durability of a heat shrink tubing splice is dependent on the hot melt that will appear from both ends of the tube.

    NOTE:
    The hot melt forms an adhesive seal between the wire insulation and the heat shrink tubing, which prevents air and moisture from entering the solder point.

    Use a shielded heat gun to heat the entire length of the heat shrink tubing until the hot melt appears from both ends of the tubing.



Manual Table of Contents

REMOTE START SYSTEM INSTALLATION

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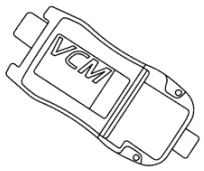
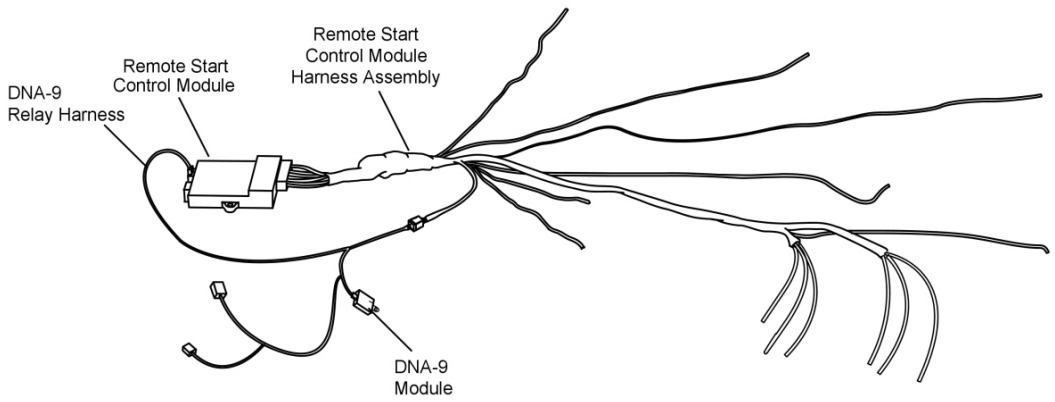
INSTALLATION

Remote Start System (RMST)

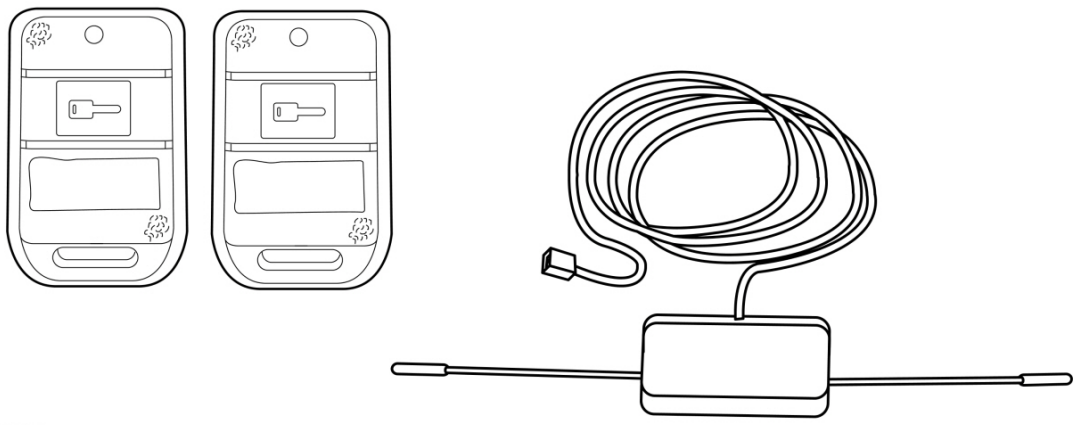
Special Tool(s)

 ST2834-A	Vehicle Communication Module (VCM) and Integrated Diagnostic System (IDS) software with appropriate hardware, or equivalent scan tool

RMST Components

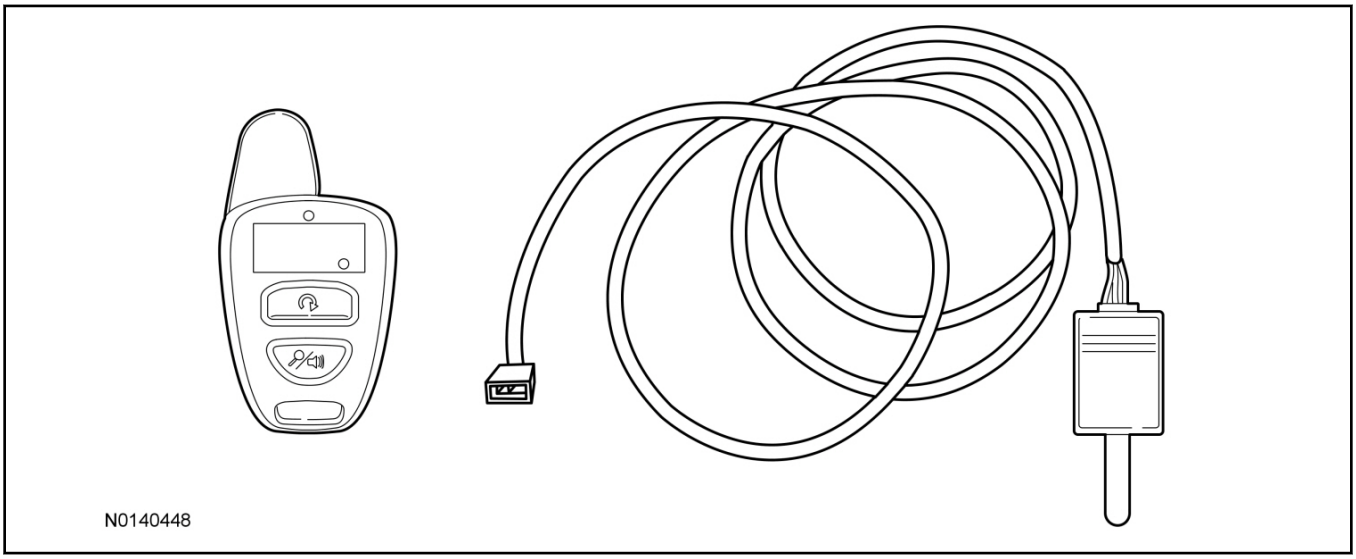


Additional "Standard RMST" Components



INSTALLATION (Continued)

Additional "Bi-directional RMST" Components



Fiesta - Push Button Start

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

1. Verify correct kit number.

Review RMST Installation Kit Contents

NOTE:
Kits are vehicle specific and are not interchangeable.

2. Review the RMST kit contents.

RMST Standard Kit Type - "A"

QUANTITY	DESCRIPTION
1	TYPE - "A" MODULE ASSEMBLY
1	RMST SOFTWARE CARTRIDGE ASSEMBLY
2	1 BUTTON POWER CODE TRANSMITTER
1	TYPE - "A" CUSTOM WIRING HARNESS
1	ANTENNA
1	HOOD SAFETY SWITCH ASSEMBLY
1	INSTALLATION PARTS BAG
1	FUSE PARTS BAG
1	OPERATORS INSTRUCTIONS
1	UNDERHOOD WARNING LABEL
1	DNA-9 MODULE

INSTALLATION (Continued)

RMST Standard Kit Type - "A"(Continued)

1	DNA-9 RELAY HARNESS
2	Wire Harness Label
1	Relay

3. Review the RMST bidirectional kit contents.

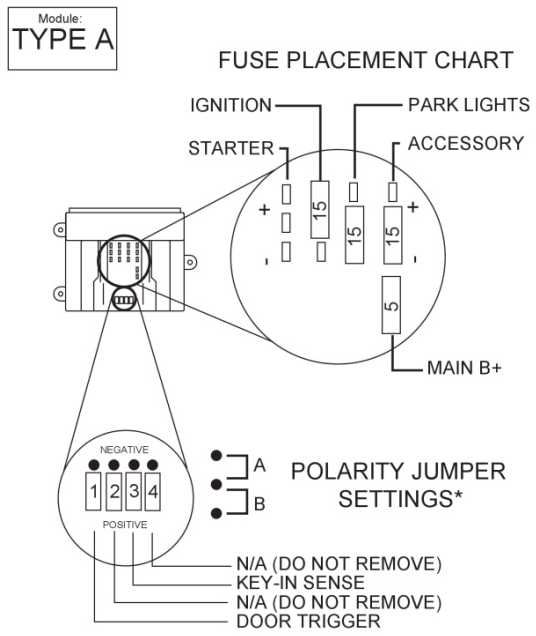
RMST System Bidirectional Kit Type - "A"

QUANTITY	DESCRIPTION
1	TYPE - "A" MODULE ASSEMBLY
1	RMST SOFTWARE CARTRIDGE ASSEMBLY
1	2 BUTTON POWER CODE TRANSMITTER
1	TYPE - "A" CUSTOM WIRING HARNESS
1	ANTENNA
1	ANTENNA HARNESS
1	HOOD SAFETY SWITCH ASSEMBLY
1	INSTALLATION PARTS BAG
1	FUSE PARTS BAG
1	OPERATORS INSTRUCTIONS
1	UNDERHOOD WARNING LABEL
1	DNA-9 MODULE
1	DNA-9 RELAY HARNESS
1	REAR-VIEW MIRROR INFORMATION CARD
2	Wire Harness Label
1	Relay

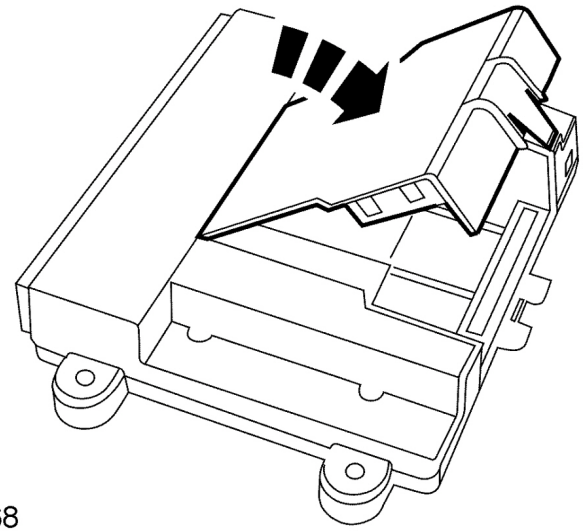
Module Preparation

4. Place the supplied fuses into the power distribution block on the RMST control module.
   - Move the polarity jumpers to their proper locations on the control module. Refer to the following illustration.

INSTALLATION (Continued)

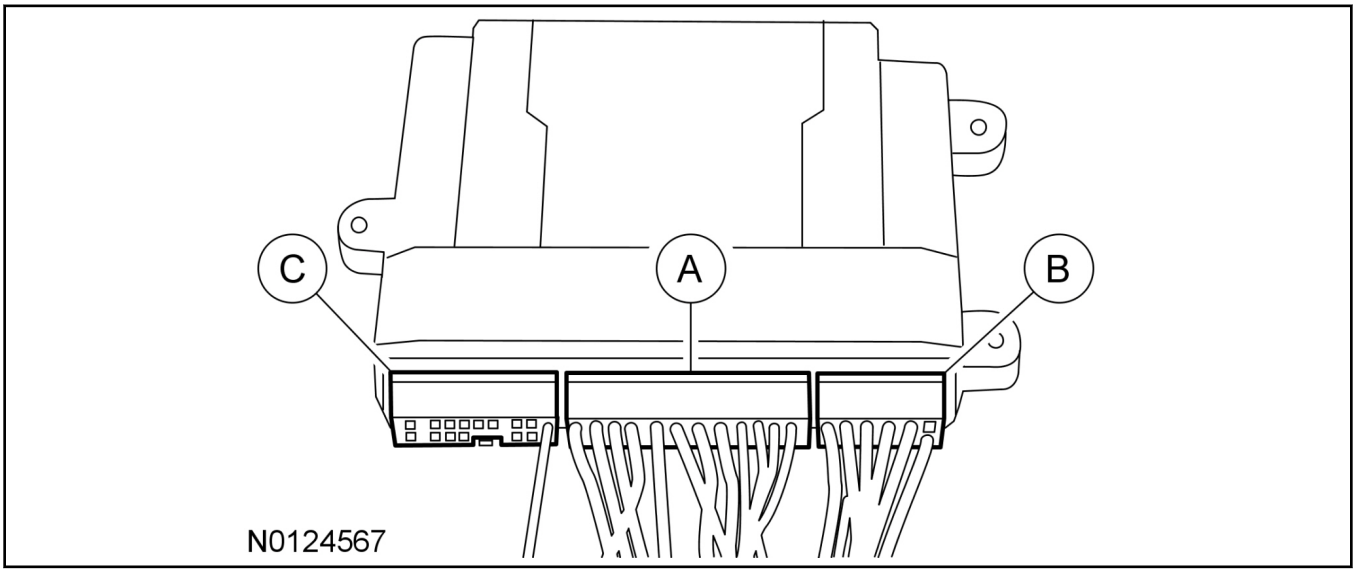


5. Place the software cartridge onto the RMST control module.



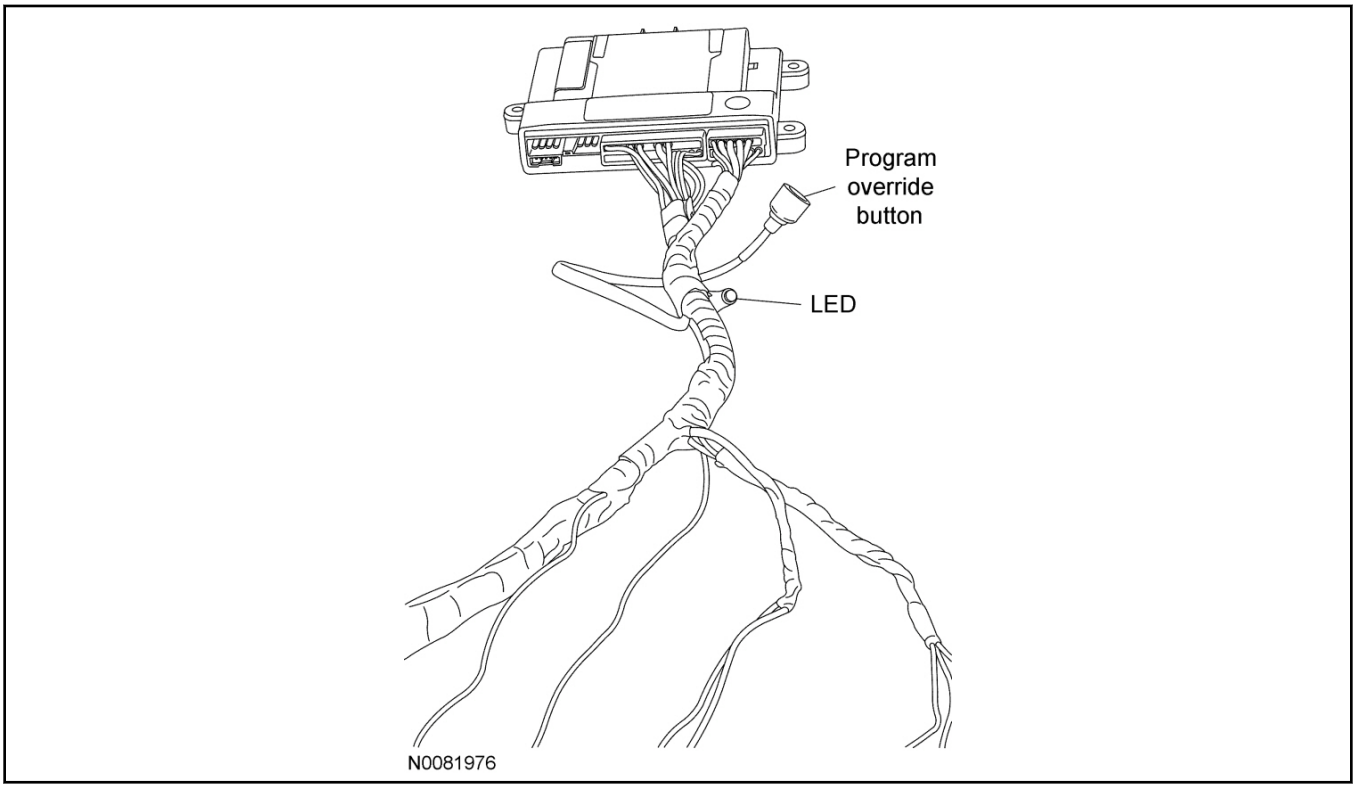
6. Plug the wiring harness(es) into the module.
   - A - Harness: 24-way, used on all systems.
   - B - Harness: 10-way, used on all systems with RMST.
   - C - Harness: 16-way, used on all systems with RMST.

INSTALLATION (Continued)



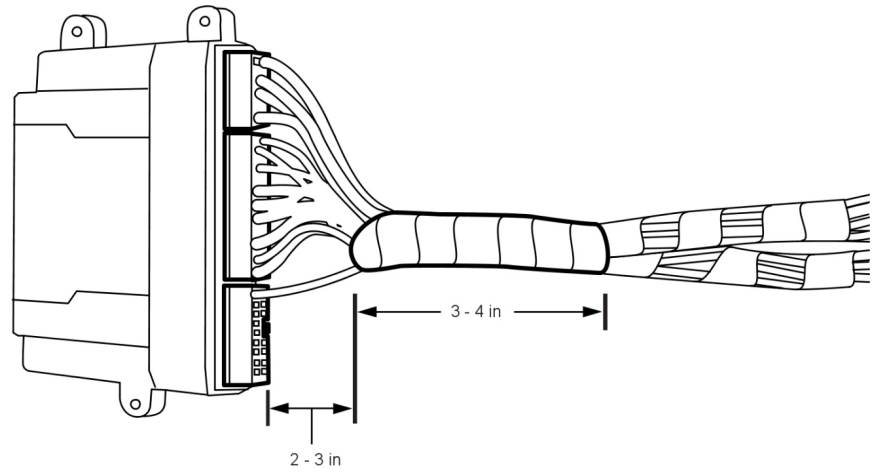
7. **NOTE:**
   Do not cut the override programming button from the harness, it is used for all installations.

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



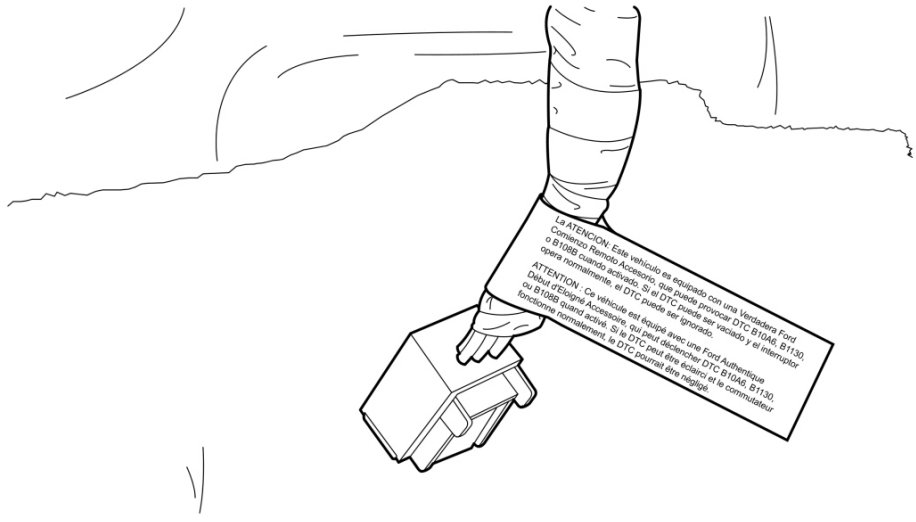
INSTALLATION (Continued)

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



Vehicle Preparation

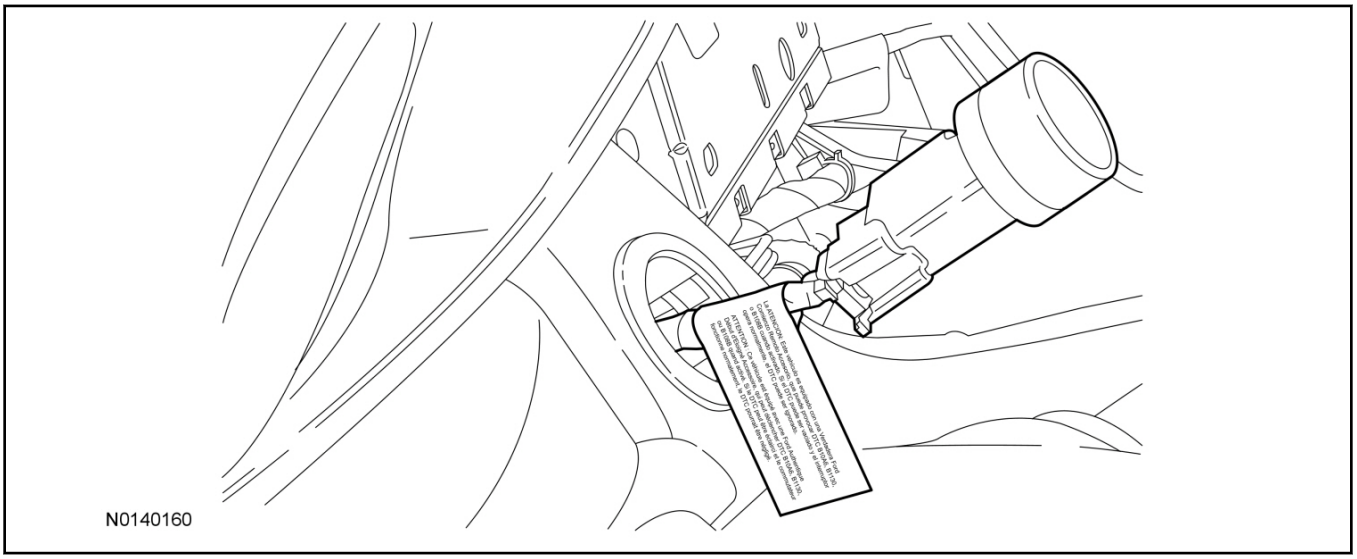
9. Remove the retainers and the upper and lower steering column shrouds.
10. Open and remove the glove box.
11. Remove the RH lower instrument panel insulator.
12. Using a suitable non-marring tool, work around the outer edge of the headlamp switch to release the clips and pull the switch out through the front of the finish panel.
    - Disconnect the electrical connector.
13. Install the supplied wire harness label to the headlamp switch harness.
    - If required, fish the headlamp switch wire harness out of the instrument panel.



14. Connect and Install the headlamp switch.
15. Remove the start/stop switch. For additional Information, refer to Workshop Manual (WSM), Section 211-05.

INSTALLATION (Continued)

16. Install the supplied wire harness label to the start/stop switch harness.



17. Install the start/stop switch. For additional Information, refer to WSM, Section 211-05.

Antenna Mounting

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

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

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

18. Choose a suitable mounting location based on the guidelines above.

Install the Antenna

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

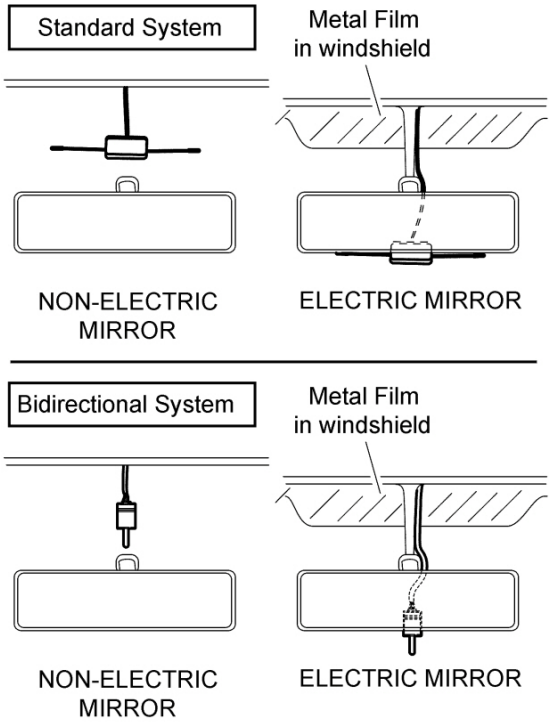
20. **NOTE:**
    Do not touch the adhesive, reduced adhesion may result.

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

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

INSTALLATION (Continued)

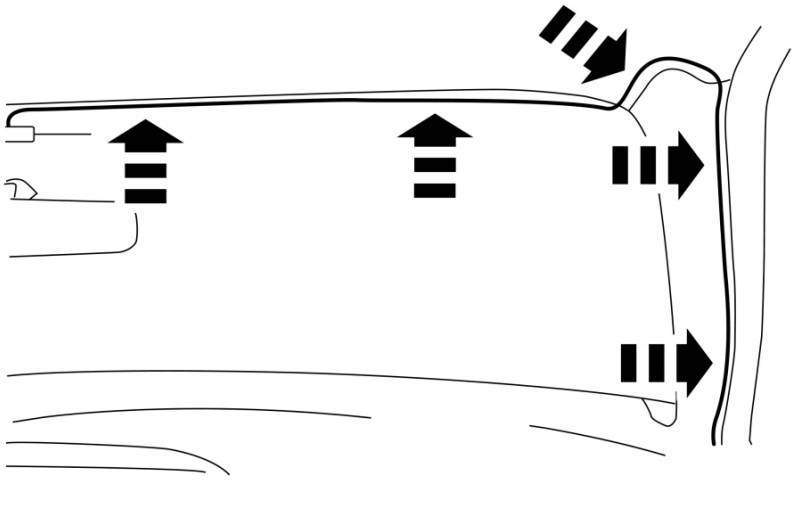
Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the windshield.



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

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

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



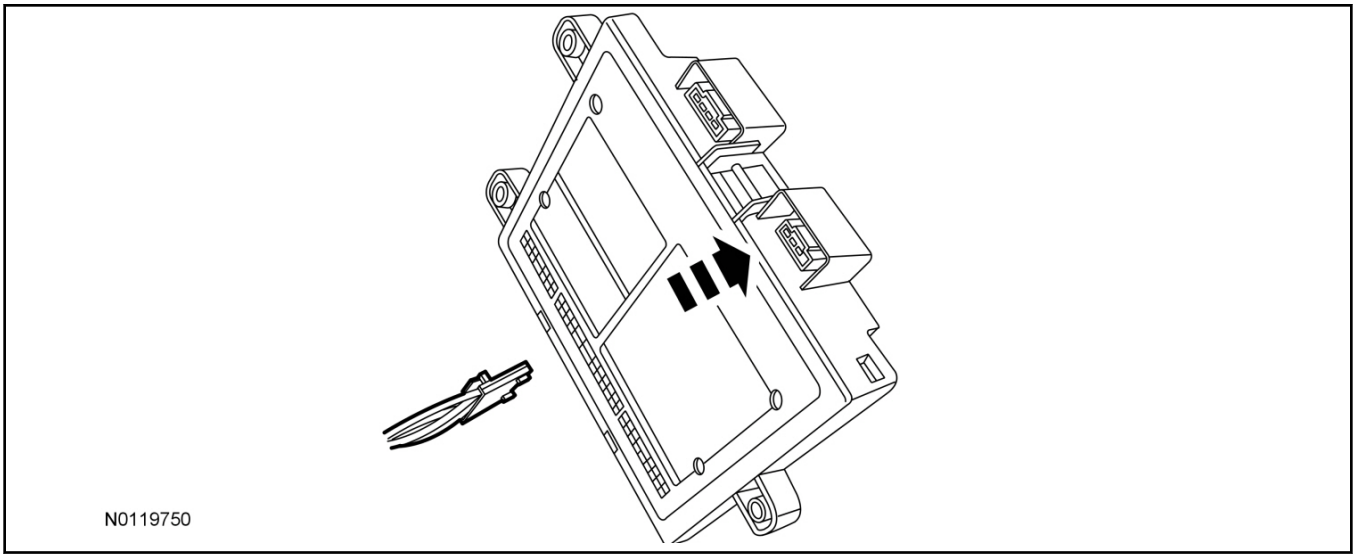
23. Reposition the A-pillar trim panel.

Install the RMST Control Module and Harness Assembly

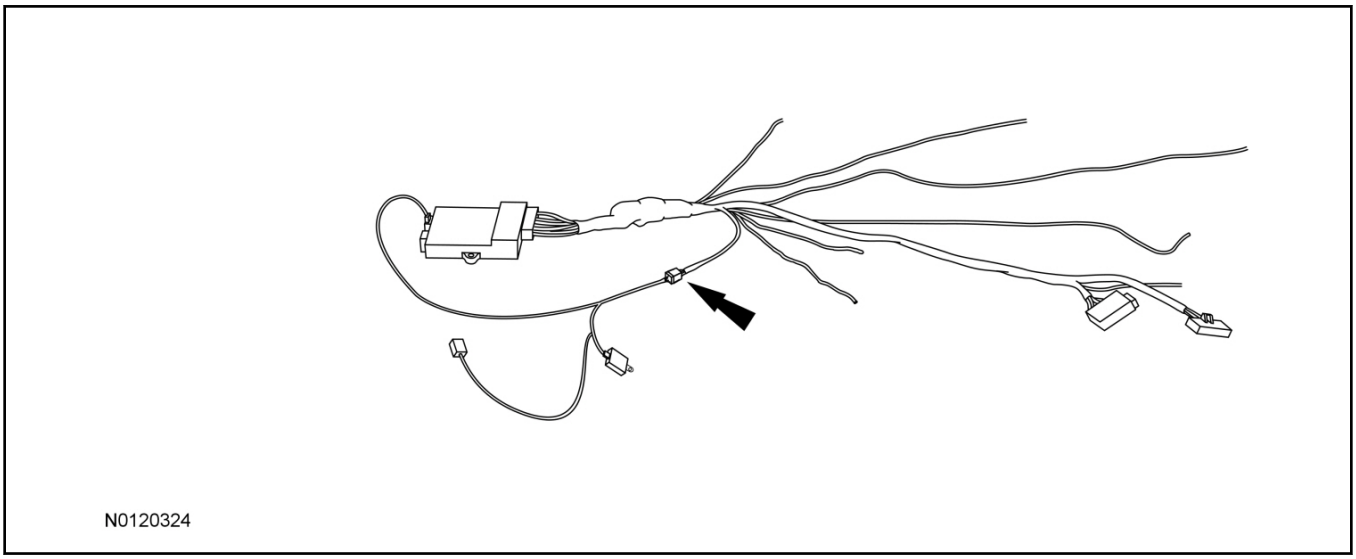
24. Place the RMST module and harness assembly on the passenger side floor.

Install the DNA-9 Relay Harness and Module

25. Disconnect the passive anti-theft system (PATS) transceiver electrical connector.
26. Connect the DNA-9 relay harness to the PATS transceiver electrical connector and to the vehicle harness.
27. Connect the DNA-9 relay harness to the RMST module.



28. Connect the DNA-9 module to the relay harness.
    - Secure to the right of the steering column with tie-straps.
29. Connect the DNA-9 relay harness to the 2-pin connector on the RMST module harness.

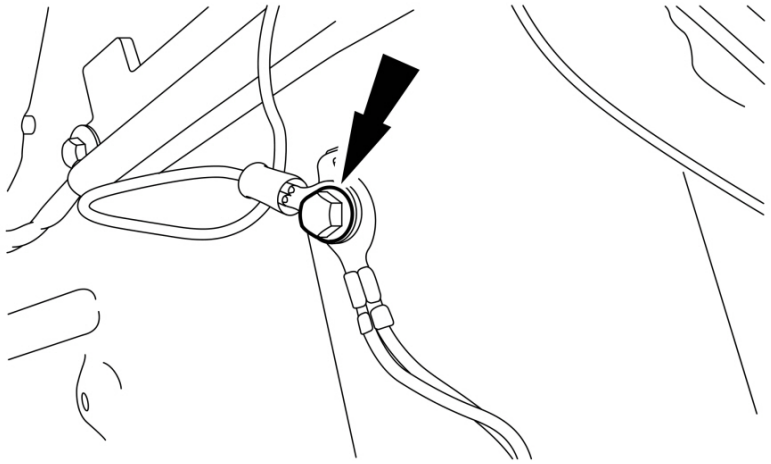


Identify Circuit Wires For Connections

30. Connect the Black ground wire from the RMST module harness to the chassis ground point on the passenger side.

INSTALLATION (Continued)

- Chassis ground points are located near the passenger side sill plate.



31. **NOTE:**
    A DVOM connected to the correct wire will show 12V, then show 0V when the horn button is held.
    A logic probe will show power on the correct wire, then show ground when the horn button is held.

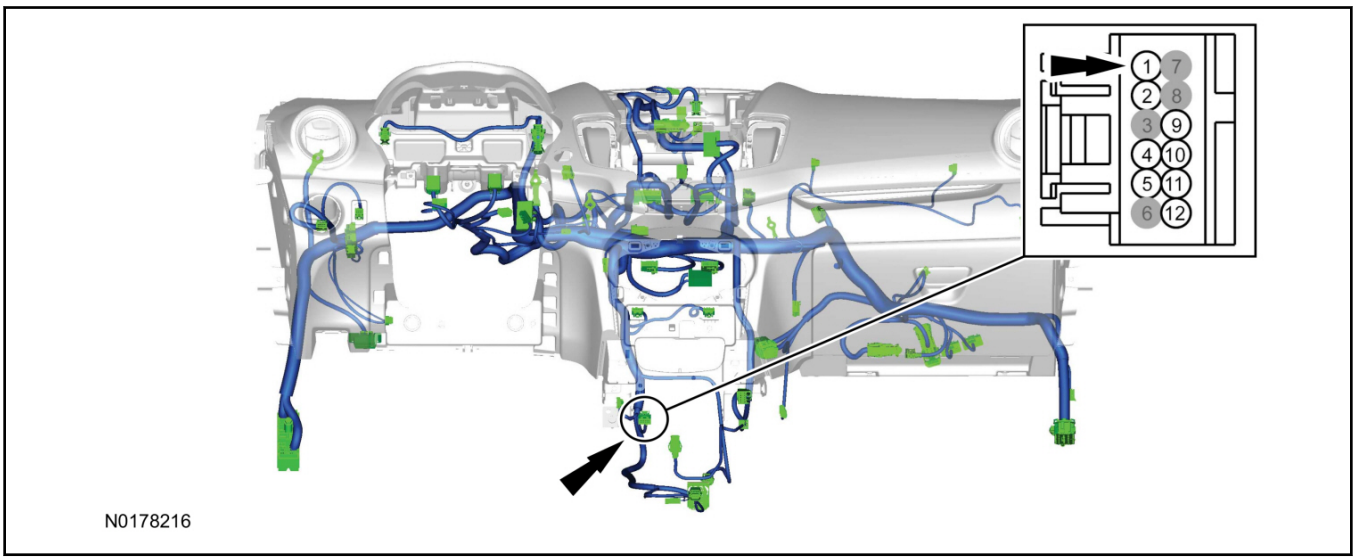
    Identify the Brown horn circuit wire at the body control module (BCM) connector C2280E pin 1.
32. Connect the Brown/Black wire from the RMST module harness to the Brown horn circuit wire at BCM connector C2280E pin 1.
33. **NOTE:**
    This circuit should be tested with ignition OFF.

    NOTE:
    A DVOM connected to the correct wire will show ~.7V, then show ~.8V when the door lock switch is pressed.
    A logic probe will show power on the correct wire, then continue to show power when the door lock switch is pressed.

    Identify the Yellow/Gray power door lock circuit wire at the BCM connector C2280G pin 10.
34. Connect the Blue wire from the RMST module harness to the Yellow/Gray power door lock circuit wire at BCM connector C2280G pin 10.
35. **NOTE:**
    A DVOM connected to the correct wire will show 0V, then show 12V while depressing the brake pedal.

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

    Identify the Blue/Gray brake switch circuit at the transmission selector lever connector pin 1.



36. Connect the Brown wire from the RMST module harness to the Blue/Gray brake switch wire at the transmission selector lever connector pin 1.

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

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

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

Identify the Yellow/Gray dome light circuit wire at the BCM connector C2280C pin 5.

38. Connect the Green/Violet wire from the RMST module harness to the Yellow/Gray dome light circuit wire at the BCM connector C2280C pin 5.

39. **NOTE:**
A DVOM connected to the correct wire will show ground with the headlamp switch in the OFF position, then momentarily show 10~11V with the headlamp switch in the parking lights ON position.

NOTE:
A logic probe will show power with the headlamp switch in the ON position and ground with the switch in the OFF position.

Identify the Yellow/Blue parking lights circuit wire at the BCM connector C2280F pin 23.

40. Connect the White wire from the RMST module harness to the Yellow/Blue parking lights circuit wire at the BCM connector C2280F pin 23.

INSTALLATION (Continued)

41. **NOTE:**
    A DVOM connected to the correct wire will show ground (0V) then show power (12V) with the brake pedal depressed.

    NOTE:
    A logic probe will show ground and then power with the brake pedal depressed.

    Identify the Violet/Gray cruise control deactivation switch circuit wire located next to the brake switch (vehicle has two independent brake pedal switches).

42. Remove the circuit 87 Yellow wire and terminal from the relay harness connector.
    - Release the locking tab and pull the wire and terminal from the connector.
    - Discard the Yellow wire, it will not be used for this application.

43. Install a suitable insulated crimp terminal eyelet to the Black interrupt relay wire. Attach the Black relay wire to a suitable grounding location.

44. Connect the Dark Green wire from the remote start module harness to the White wire at the relay harness.

45. **NOTE:**
    Be sure to leave enough wire at each end of the cut wire to properly splice the relay wire leading back to the cruise control deactivation switch harness.

    Cut the Violet/Gray brake pedal switch wire **previously identified in step 41.**
    - Connect the Blue wire from the relay harness to the side of the Violet/Gray wire leading back to the cruise control deactivation switch.
    - Connect the Red wire from the relay harness to the side of the Violet/Gray wire leading away from the cruise control deactivation switch.

46. **NOTE:**
    A DVOM connected to the correct wire will show near 0V then show 12V when the ignition switch is pressed.

    NOTE:
    A logic probe will show open/low power and then power when the ignition switch is pressed.

    Identify the Gray/Brown ignition switch circuit wire at BCM connector C2280B Pin 13.

47. Connect the Pink wire from the RMST module harness to the Gray/Brown ignition switch circuit wire at BCM connector C2280B Pin 13.

48. **NOTE:**
    A DVOM connected to the correct wire will show power then show 0V when the ignition switch is pressed.

    NOTE:
    A logic probe will show the wire rests at power and then ground when the ignition switch is pressed.

NOTE:
There are several Yellow/Orange wires at the passenger side kick panel connector C212. Test to ensure the correct starter circuit wire has been identified.

Identify the Yellow/Orange starter circuit wire at the passenger side kick panel connector C212 Pin 43.

49. Connect the Violet wire from the RMST module harness to the Yellow/Orange starter circuit wire at the passenger side kick panel connector C212 Pin 43.

50. **NOTE:**
A DVOM connected to the correct wire will show ~.9V, then show 0V when the door lock switch is pressed.
A logic probe will show power on the correct wire, then show ground when the door lock switch is pressed.

Identify the Blue/Brown Unlock Sense circuit wire at BCM connector C2280G Pin 8.

51. Connect the Blue/Orange wire from the RMST module harness to the Blue/Brown Unlock Sense circuit wire at BCM connector C2280G Pin 8.

52. **NOTE:**
A DVOM connected to the correct wire will show 0V, then show power when the driver door is open.
A logic probe will show ground on the correct wire, then show power when the driver door is open.

Identify the Green/Violet door ajar circuit wire at BCM connector C2280G Pin 19.

53. Cut the Green/Violet door ajar circuit wire at BCM connector C2280G Pin 19.

54. Splice one of the following wires to each side of the previously cut Green/Violet door ajar circuit wire at BCM connector C2280G Pin 19.
    - Orange/Black wire from the RMST module harness to the harness side of the cut.
    - Orange wire from the RMST module harness to the BCM side of the cut.

Power Connection

55. **NOTE:**
A DVOM connected to the correct wire will show 12V with the ignition in the OFF position.

NOTE:
A logic probe will show power with the ignition in the OFF position.

Identify the Gray/Red battery circuit wire at the BCM connector C2280A Pin 1.

56. Connect the Red wire from the RMST module harness to the Gray/Red battery circuit wire at the BCM connector C2280A Pin 1.

Install the Hood Safety Switch

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

INSTALLATION (Continued)

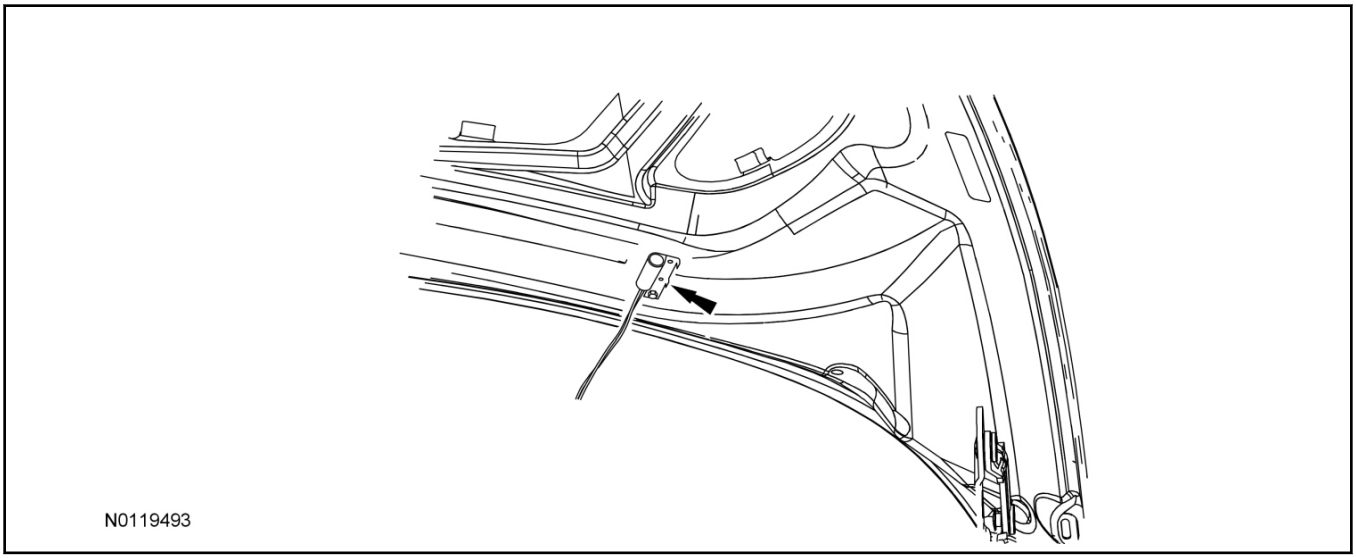
NOTE:
Using a piece of convolute adds in the appearance of the installation.

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:

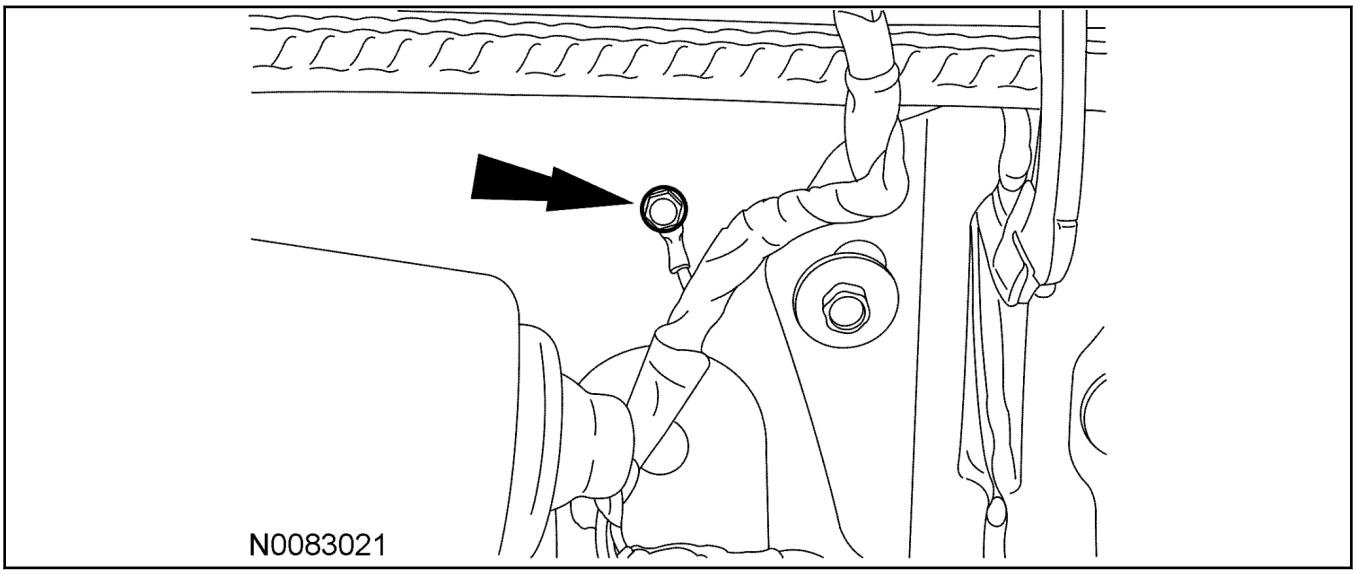
- False alarm trips
- Non-RMST events
- Inadvertent shutdown during RMST

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

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



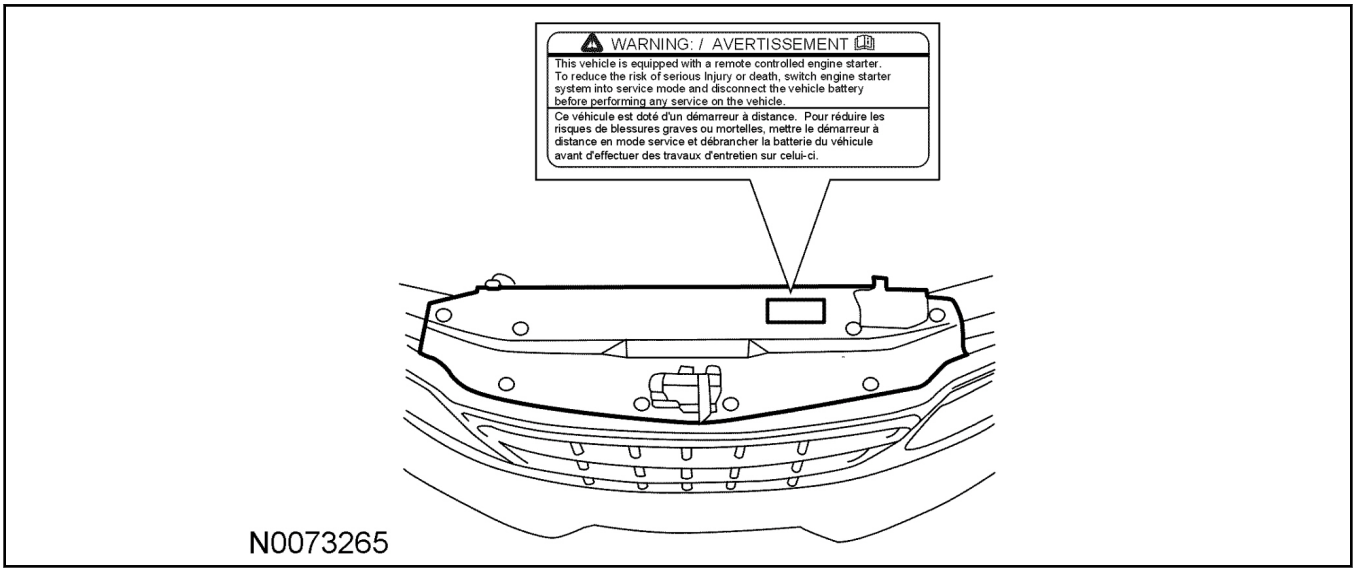
59. Connect the hood switch ground wire to a suitable location on the bulkhead.



INSTALLATION (Continued)

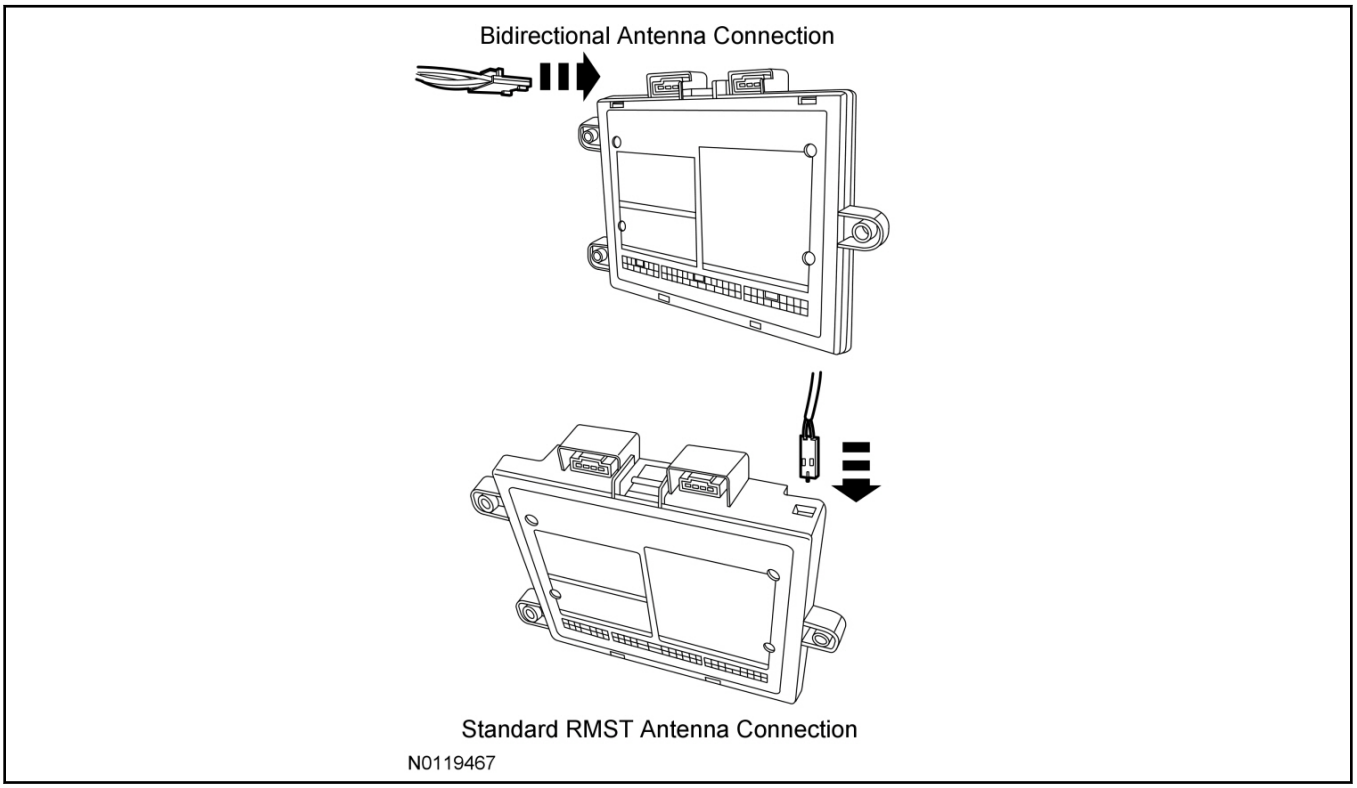
60. **NOTE:**
    Place the label on the radiator fan shroud or similar area.

    Install the underhood warning label.



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

62. Connect the antenna to the RMST control module.



Program the RMST System

63. Refer to the RMST programming section for this vehicle.

Secure RMST Harness and Control Module

64. Use the supplied tie-straps to secure the RMST harness wires.

65. **NOTE:**
    Do not mount the control module in the knee bolster area.
    Secure the control module at three points to the vehicle.

    Use the supplied long tie-straps to mount the RMST control module to the underdash wiring harness, to the right of the steering column.

Install Trim

66. Install the upper and lower steering column shrouds.
    Install the retainers.

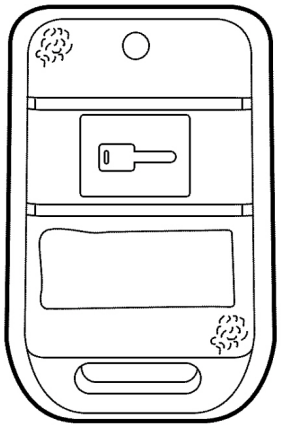
67. Install the glove compartment.

68. Install the RH lower instrument panel insulator.

NOTE:
The following step is for bi-directional RMST kits only.

69. Hang the customer's rear view mirror information card on the rear view mirror.

Programming - Standard RMST



STANDARD RMST FOB

N0097291

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

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

NOTE:
The RMST override button must be accessible.

70. Make sure that the hood and doors are closed before proceeding.

Programming Options: Entering Programming Mode

71. See chart below for programming information.

Program Bank 1 Chart (4 - Honks/Flashes)

BANK	OPTIONS	DESCR	LED
1	4	HORN HONK EXTENDED	ON

72. With foot off the brake, place the ignition in the "ON" position.
73. Depress the brake pedal. Press and hold the RMST system override button for at least 10 seconds. After 10 seconds the horn will honk and/or parking lights will flash 3 times, indicating the system is now in the learn mode. Release the brake pedal and the RMST override button.
74. Press and release the override button. The horn will honk and/or parking lights will flash 4 times indicating the system has entered the first program bank. If not, please check the following:
    - Brake pedal switch wire solder connection.
    - Hood closed and Grey hood safety switch wire solder connection.
    - All doors closed and dome light circuit wire solder connections.
    - The key is in the RUN position.
    - The software cartridge is firmly seated in the RMST module.
    - The RMST harness connections are firmly seated in the RMST module.

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

75. Press and release the brake pedal 4 times.
    - The horn will honk and/or parking lights will flash 4 times indicating the system has entered option 4 of the first program bank.

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

76. Press the transmitter remote start button once, the LED will turn on indicating the "Horn Honk Extended" option is enabled.

NOTE:
The RMST module is now programmed.

77. Place the ignition in the "OFF" position, exit the vehicle and test the system.
    - Horn should honk when vehicle is remote started.
78. See chart below for programming information.

INSTALLATION (Continued)

Program Bank 2 Chart (5 Honks/Flashes)

BANK	OPTIONS	DESCRIPTION	LED
2	1	TACHLESS MODE	ON

79. With foot off the brake, place the ignition in the "ON" position.
80. Depress the brake pedal. Press and hold the RMST system override button for at least 10 seconds. After 10 seconds the horn will honk and/or parking lights will flash 3 times, indicating the system is now in the learn mode. Release the brake pedal and the RMST override button.
81. Press and release the override button. The horn will honk and/or parking lights will flash 4 times indicating the system has entered the first program bank. If not, please check the following:
    - Brake pedal switch wire solder connection.
    - Hood closed and Grey hood safety switch wire solder connection.
    - All doors closed and dome light circuit wire solder connections.
    - The key is in the RUN position.
    - The software cartridge is firmly seated in the RMST module.
    - The RMST harness connections are firmly seated in the RMST module.

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

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

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

84. 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 RMST fob button and verify the LED illuminates.

NOTE:
The RMST module is now programmed.

85. Place the ignition in the "OFF" position.

Programming the DNA-9 Using Diagnostic Equipment

NOTE:
This procedure only programs the Passive Anti-Theft System (PATS) portion of the key into the Instrument Panel Cluster (IPC).

INSTALLATION (Continued)

86. With an Intelligent Access key in the vehicle, turn the ignition on by pushing the Start button without depressing the brake.
87. From the scan tool, enter TOOLBOX. Select Body>Security>PATS Functions and follow the Integrated Diagnostic System (IDS) on-screen instructions to enter PATS security access.
88. Once security access is granted, prepare the RMST module for PATS programming. Press and hold the brake pedal.
89. Remove the Intelligent Access key from the vehicle and place on workbench 10 feet from the vehicle.
90. Press and hold the RMST system override button on the RMST harness for at least 10 seconds.
    - After 10 seconds the horn will honk 3 times, indicating the system is now in the learn mode.
    - Release the brake pedal and the RMST override button.
91. Press and release the override button 1 time. The horn should honk 4 times.
92. Quickly press and release the RMST button on the RMST key fob 1 time. Verify that the LED has turned on. This indicates that the RMST module is ready for programming to the vehicle PATS system.

NOTE:
You may need to perform the following step **TWICE** in order to successfully program the RMST system.

93. From the scan tool menu, select "Program additional transponder key". Follow the on screen prompts to program additional keys and to program the RMST system to the vehicle.
94. Disconnect the scan tool, and turn off the ignition when complete.

Functional Test - Standard RMST

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

95. Make sure all doors are closed but hood is open and windows are down (doors will be locking).
96. Press and hold the Start button on the remote control key fob for 2-3 seconds, the Horn should honk once indicating receipt of the start request.
97. The RMST systems should turn on the ignition, but then honk the horn twice and shut down indicating the hood is open.
98. Attempt to re-start the vehicle again using the key fob.
99. Remove the key and open a door.
100. Attempt to re-start the vehicle again using the key fob.
101. The RMST systems should turn on the ignition, but then honk the horn three times and shutdown indicating a door is open.
102. Close the door.

INSTALLATION (Continued)

103. Attempt to re-start the vehicle again using the key fob.
104. Once the vehicle starts, verify that all heat and A/C functions operate normally and that the doors have locked.
105. On vehicles equipped with power window interrupt, Attempt to close windows to check power window interrupt function.
106. Once all systems have been checked, open the door, or press the brake pedal. The RMST systems should shut down.
107. Restart the vehicle then unlock and open the door. The RMST systems should shut down.
108. Verify that the vehicle can be restarted with the Intelligent Access key, 3-5 seconds after engine shutdown.
109. See the Remote Start System Diagnosis Guide to resolve issues identified by the functional test.

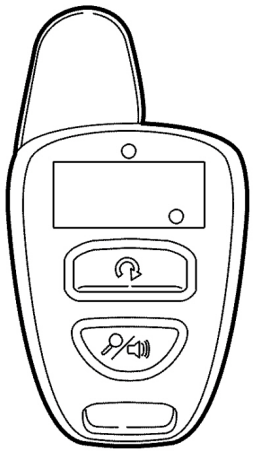
Troubleshooting

110. **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 RMST 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	DNA-9 not programmed correctly, or the DNA-9 antenna ring is damaged.
2 Chirps	BRAKE is being pressed, or the HOOD is open.
3 Chirps	One of the vehicles DOORS are open.
4 Chirps	TACH not programmed.
5 Chirps	The KEY is in the ignition.
6 Chirps	The RMST system is in SERVICE/VALET mode.

INSTALLATION (Continued)

Programming Bi-directional RMST



BIDIRECTIONAL FOB

N0097292

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

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

NOTE:
The RMST override button must be accessible.

111. Make sure that the hood and doors are closed before proceeding.

Programming Options: Entering Programming Mode

112. See chart below for programming information.

Program Bank 1 Chart (4 - Honks/Flashes)

BANK	OPTIONS	DESCR	LED
1	4	HORN HONK EXTENDED	ON

113. With foot off the brake, place the ignition in the "ON" position.

114. Depress the brake pedal. Press and hold the RMST system override button for at least 10 seconds. After 10 seconds the horn will honk and/or parking lights will flash 3 times, indicating the system is now in the learn mode. Release the brake pedal and the RMST override button.

115. Press and release the override button. The horn will honk and/or parking lights will flash 4 times indicating the system has entered the first program bank. If not, please check the following:

- Brake pedal switch wire solder connection.
- Hood closed and Grey hood safety switch wire solder connection.
- All doors closed and dome light circuit wire solder connections.
- The key is in the RUN position.

INSTALLATION (Continued)

- The software cartridge is firmly seated in the RMST module.
- The RMST harness connections are firmly seated in the RMST module.

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

116. Press and release the brake pedal 4 times.
    - The horn will honk and/or parking lights will flash 4 times indicating the system has entered option 4 of the first program bank.

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

117. Press the transmitter remote start button once, the LED will turn on indicating the "Horn Honk Extended" option is enabled.

NOTE:
The RMST module is now programmed.

118. Place the ignition in the "OFF" position, exit the vehicle and test the system.
    - Horn should honk when vehicle is remote started.

119. See chart below for programming information.

Program Bank 2 Chart (5 Honks/Flashes)

BANK	OPTIONS	DESCRIPTION	LED
2	1	TACHLESS MODE	ON

120. With foot off the brake, place the ignition in the "ON" position.

121. Depress the brake pedal. Press and hold the RMST system override button for at least 10 seconds. After 10 seconds the horn will honk and/or parking lights will flash 3 times, indicating the system is now in the learn mode. Release the brake pedal and the RMST override button.

122. Press and release the override button. The horn will honk and/or parking lights will flash 4 times indicating the system has entered the first program bank. If not, please check the following:
    - Brake pedal switch wire solder connection.
    - Hood closed and Grey hood safety switch wire solder connection.
    - All doors closed and dome light circuit wire solder connections.
    - The key is in the RUN position.
    - The software cartridge is firmly seated in the RMST module.
    - The RMST harness connections are firmly seated in the RMST module.

INSTALLATION (Continued)

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

123. Press and release the override button again. The horn will honk and/or parking lights will flash 5 times indicating the system has entered the second program bank.

124. Press and release the brake pedal.

- The horn will honk and/or parking lights will flash 1 time indicating the system has entered option 1 of the second program bank.

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

125. 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 RMST fob button and verify the LED illuminates.

NOTE:
The RMST module is now programmed.

126. Place the ignition in the "OFF" position.

Programming the DNA-9 Using Diagnostic Equipment

NOTE:
This procedure only programs the Passive Anti-Theft System (PATS) portion of the key into the Instrument Panel Cluster (IPC).

127. With an Intelligent Access key in the vehicle, turn the ignition on by pushing the Start button without depressing the brake.

128. From the scan tool, enter TOOLBOX. Select Body>Security>PATS Functions and follow the Integrated Diagnostic System (IDS) on-screen instructions to enter PATS security access.

129. Once security access is granted, prepare the RMST module for PATS programming. Press and hold the brake pedal.

130. Remove the Intelligent Access key from the vehicle and place on workbench 10 feet from the vehicle.

131. Press and hold the RMST system override button on the RMST harness for at least 10 seconds.

- After 10 seconds the horn will honk 3 times, indicating the system is now in the learn mode.
- Release the brake pedal and the RMST override button.

132. Press and release the override button 1 time. The horn should honk 4 times.

133. Quickly press and release the RMST button on the RMST key fob 1 time. Verify that the LED has turned on. This indicates that the RMST module is ready for programming to the vehicle PATS system.

INSTALLATION (Continued)

NOTE:
You may need to perform the following step **TWICE** in order to successfully program the RMST system.

134. From the scan tool menu, select "Program additional transponder key". Follow the on screen prompts to program additional keys and to program the RMST system to the vehicle.
135. Disconnect the scan tool, and turn off the ignition when complete.

Functional Test - Bi-directional RMST

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

136. Make sure all doors are closed but hood is open and windows are down (doors will be locking).
137. Press and hold the Start button on the remote control key fob for 2-3 seconds, the Horn should honk once indicating receipt of the start request.
138. The RMST systems should turn on the ignition, but then honk the horn twice and shut down indicating the hood is open.
139. Attempt to re-start the vehicle again using the key fob.
140. Remove the key and open a door.
141. Attempt to re-start the vehicle again using the key fob.
142. The RMST systems should turn on the ignition, but then honk the horn three times and shutdown indicating a door is open.
143. Close the door.
144. Attempt to re-start the vehicle again using the key fob.
145. Once the vehicle starts, verify that all heat and A/C functions operate normally and that the doors have locked.
146. On vehicles equipped with power window interrupt, Attempt to close windows to check power window interrupt function.
147. Once all systems have been checked, open the door, or press the brake pedal. The RMST systems should shut down.
148. Restart the vehicle then unlock and open the door. The RMST systems should shut down.
149. Verify that the vehicle can be restarted with the Intelligent Access key, 3-5 seconds after engine shutdown.
150. See the Remote Start System Diagnosis Guide to resolve issues identified by the functional test.

Troubleshooting

151. **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 RMST 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	DNA-9 not programmed correctly, or the DNA-9 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.

2018 Fiesta - Push Button Start

TYPE "A" CUSTOM WIRE HARNESS

RMST MODULE WIRE HARNESS

	Color	Function
A-7	PINK	Ignition Input/Output
A-2	VIOLET	Starter Output
A-4	RED	Battery
A-13	ORANGE	Door Ajar Switch 1
C-9	ORANGE/BLACK	Door Ajar Switch 2
B-9	BLUE/ORANGE	Unlock Sense
A-20	GREEN/VIOLET	Door Ajar Switch Input

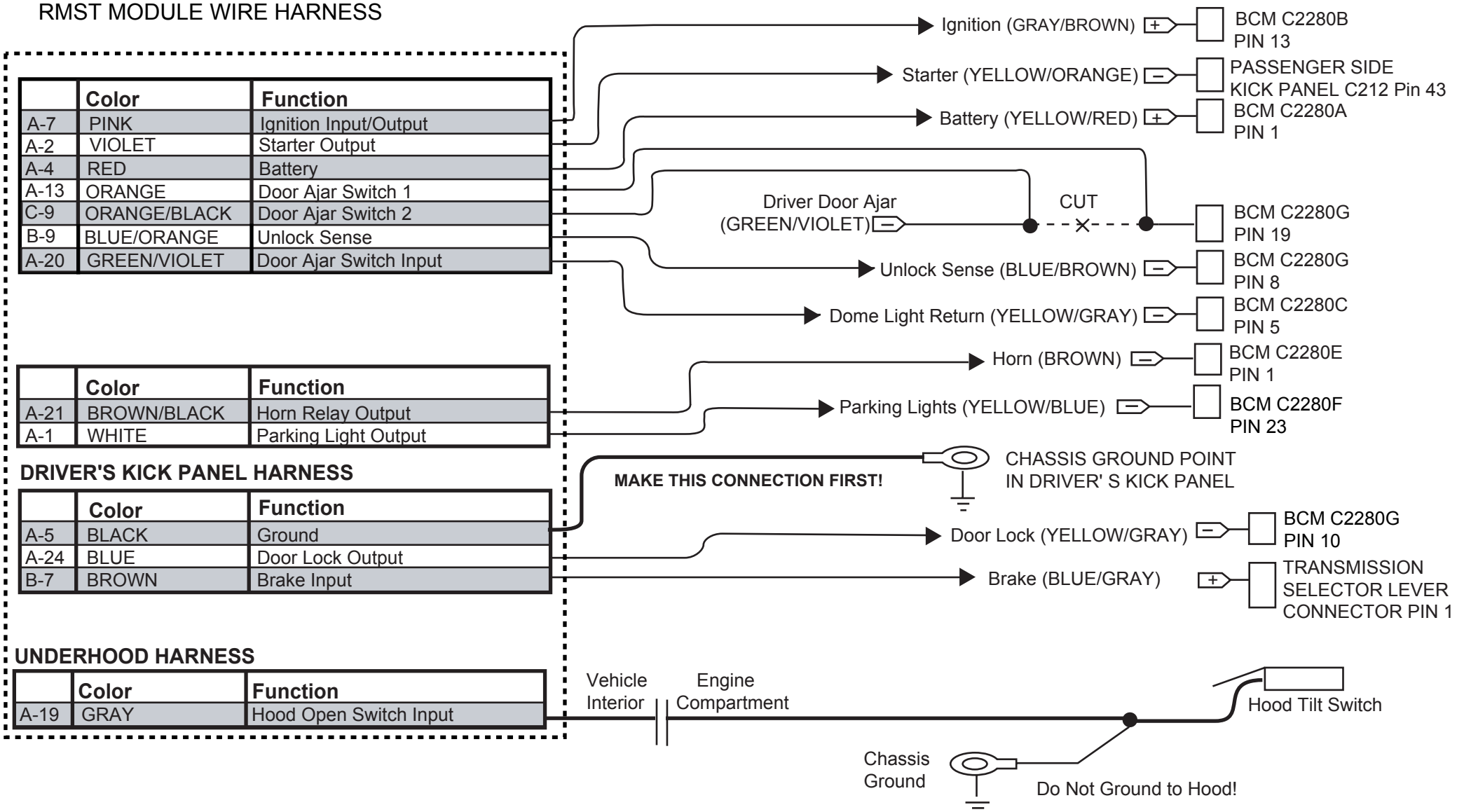
	Color	Function
A-21	BROWN/BLACK	Horn Relay Output
A-1	WHITE	Parking Light Output

DRIVER'S KICK PANEL HARNESS

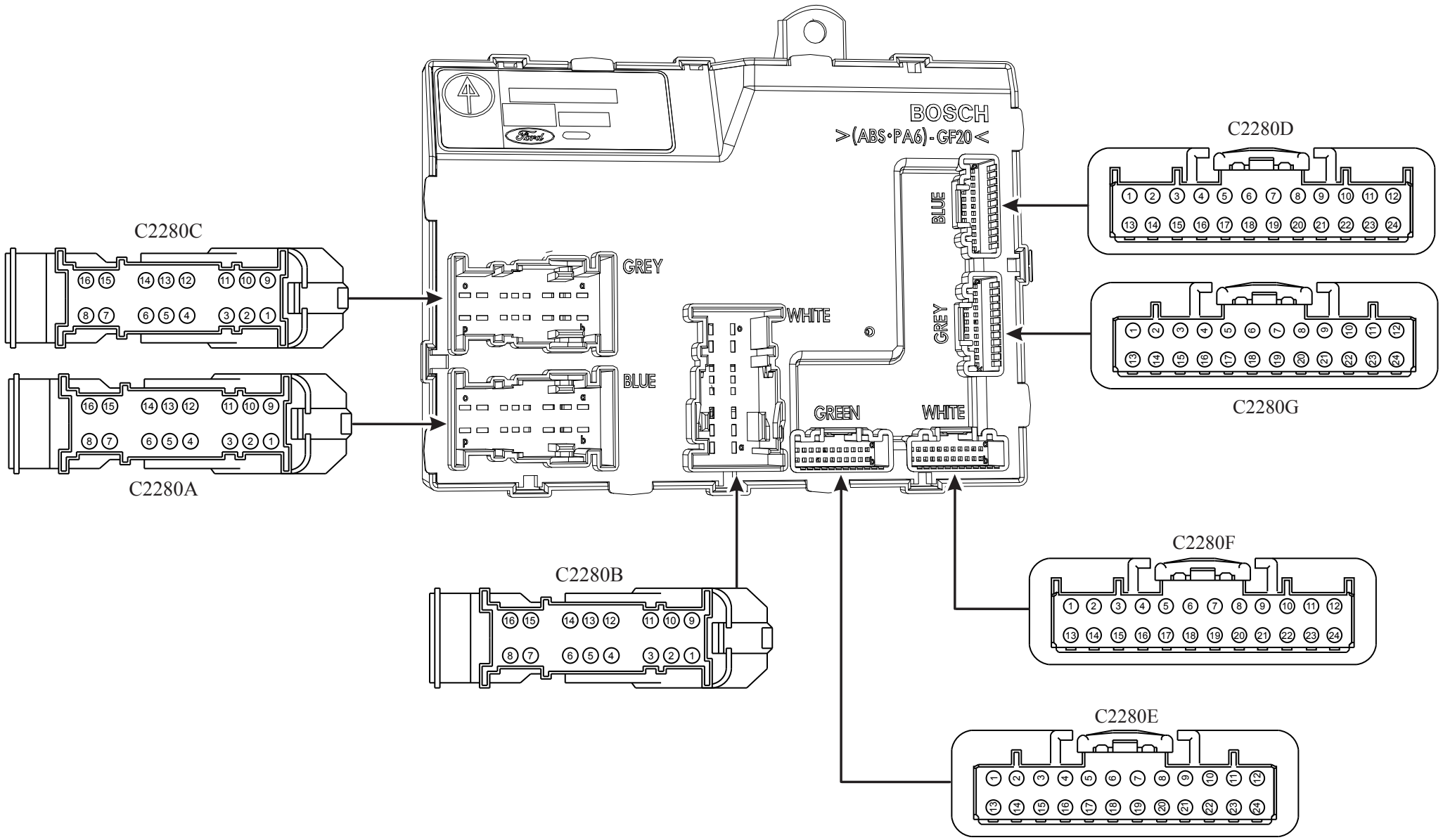
	Color	Function
A-5	BLACK	Ground
A-24	BLUE	Door Lock Output
B-7	BROWN	Brake Input

UNDERHOOD HARNESS

	Color	Function
A-19	GRAY	Hood Open Switch Input



Body Control Module (BCM)

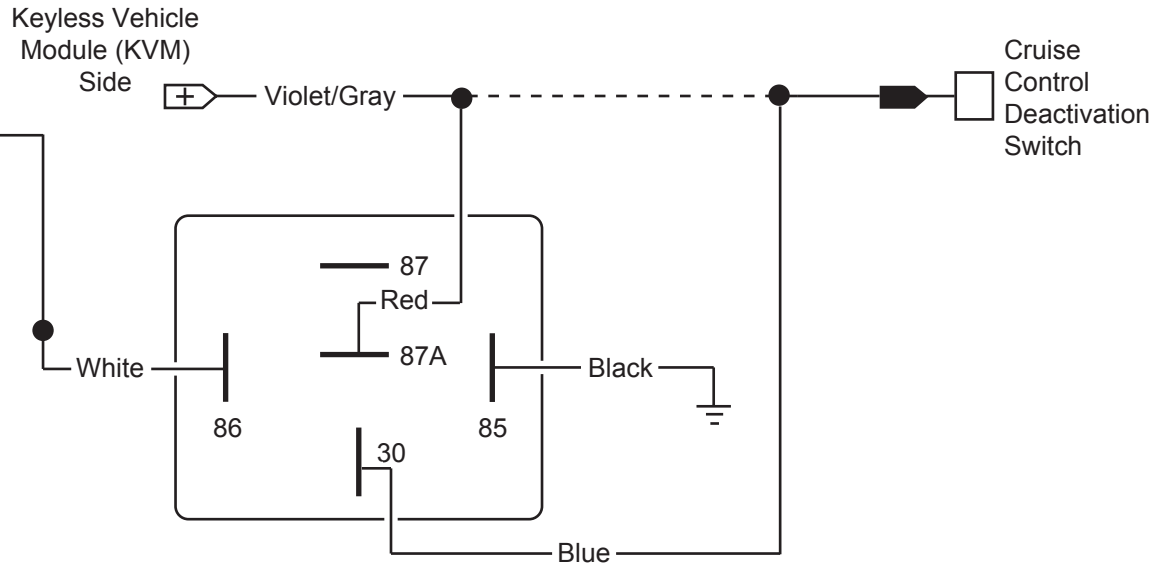


NOTE: The connections for PIN 87A and 30 of the relay must be made at the brake switch. The remote start will not function if this connection is made in any other location.

2018 Fiesta - Push Button Start

BRAKE SWITCH ACTIVATION RELAY

	Color	Function
A-3	Dark Green	Brake output



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REMOTE START SYSTEM INSTALLATION

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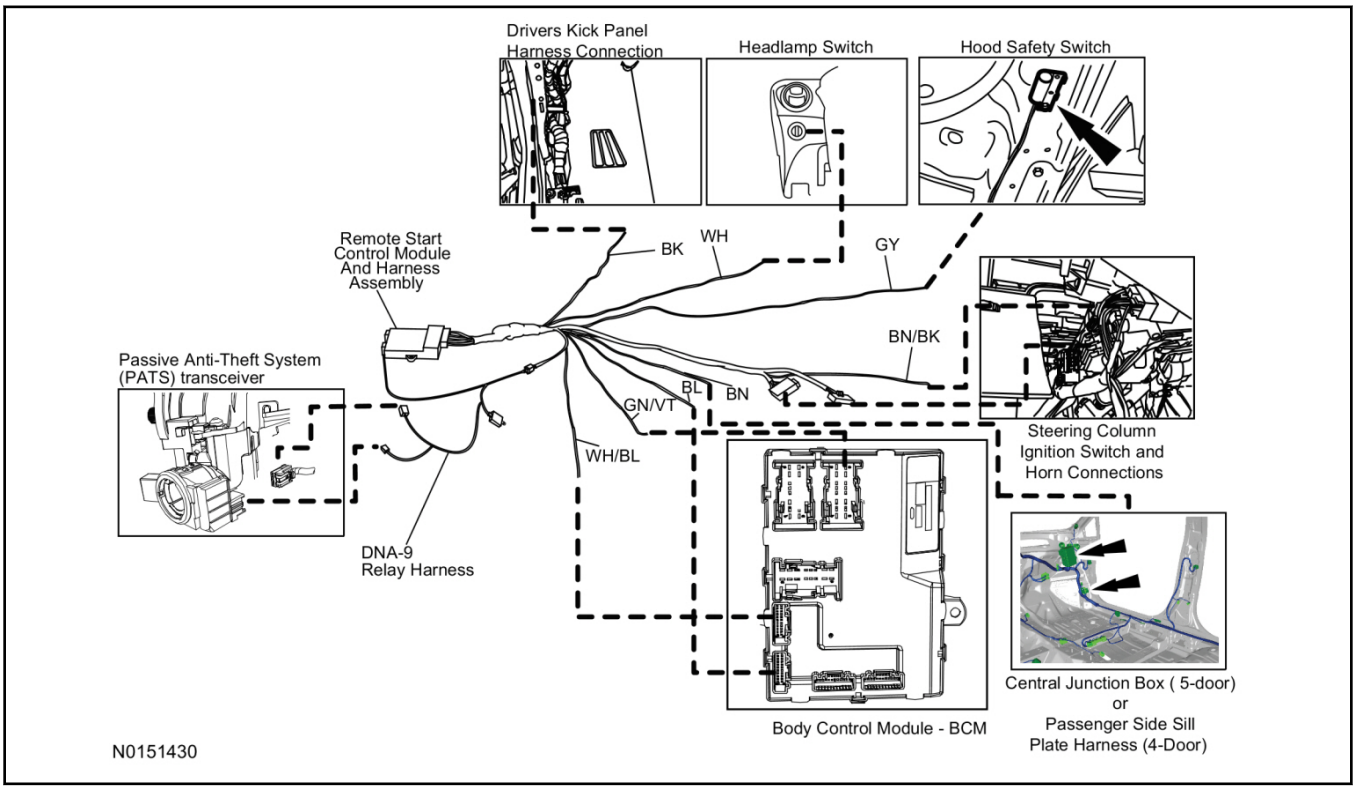
INSTALLATION

Remote Start - Fiesta - Key Start

Remote Start System (RMST) Components



Fiesta - Key Start

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

1. Verify correct kit number.

Review Remote Start Installation Kit Contents

NOTE:
Kits are vehicle specific and are not interchangeable.

2. Review the RMST kit contents.

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

QUANTITY	DESCRIPTION
1	TYPE - "A" MODULE ASSEMBLY
1	RMST SOFTWARE CARTRIDGE ASSEMBLY
2	1 BUTTON POWER CODE TRANSMITTER
1	TYPE - "A" CUSTOM WIRING HARNESS

INSTALLATION (Continued)

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

1	ANTENNA
1	HOOD SAFETY SWITCH ASSEMBLY
1	INSTALLATION PARTS BAG
1	FUSE, PARTS BAG
1	OPERATORS INSTRUCTIONS
1	UNDERHOOD WARNING LABEL
1	DNA-9 RELAY HARNESS

3. Review the RMST bi-directional kit contents.

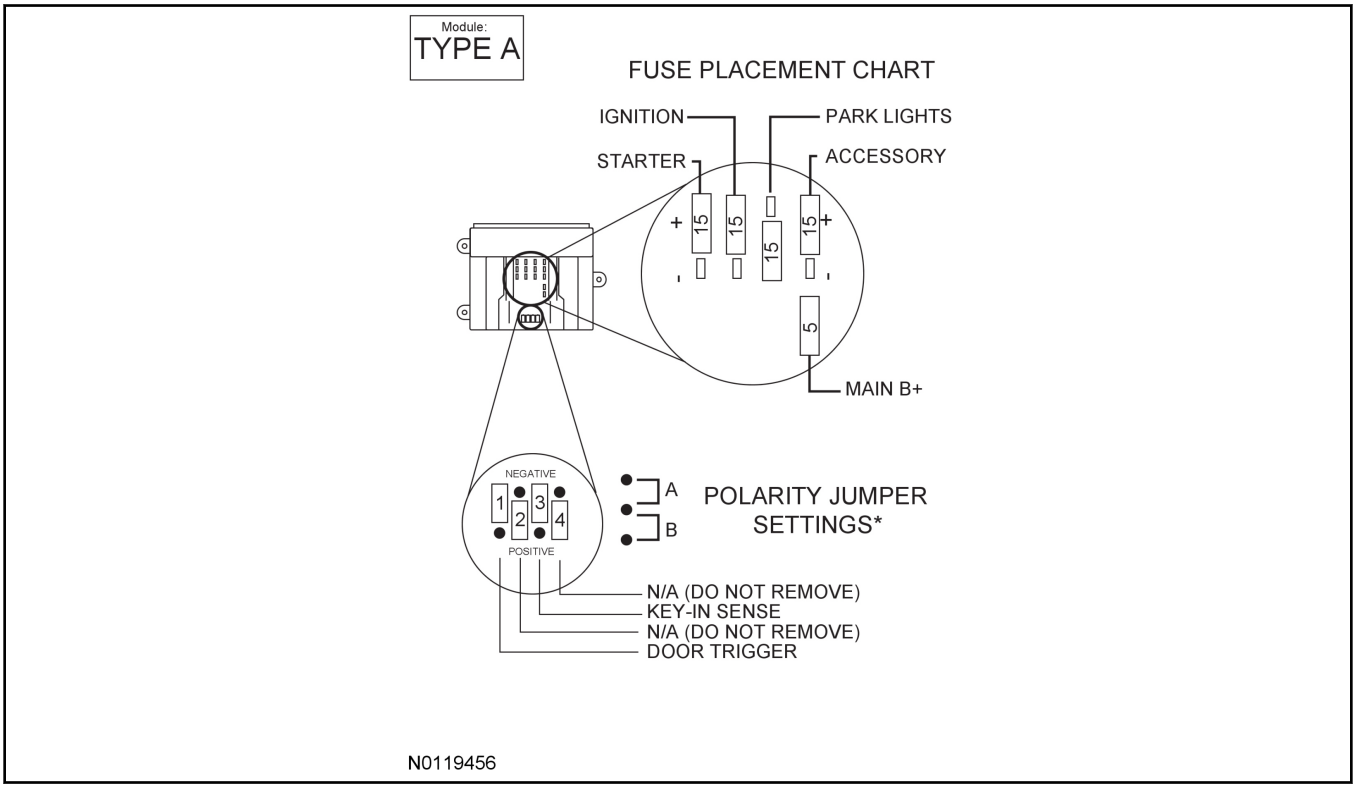
Remote Start System Bi-directional Kit (RMST) Type - "A"

QUANTITY	DESCRIPTION
1	TYPE - "A" MODULE ASSEMBLY
1	RMST SOFTWARE CARTRIDGE ASSEMBLY
1	2 BUTTON POWER CODE TRANSMITTER
1	TYPE - "A" CUSTOM WIRING HARNESS
1	ANTENNA
1	ANTENNA HARNESS
1	HOOD SAFETY SWITCH ASSEMBLY
1	INSTALLATION PARTS BAG
1	FUSE, PARTS BAG
1	OPERATORS INSTRUCTIONS
1	UNDERHOOD WARNING LABEL
1	DNA-9 RELAY HARNESS

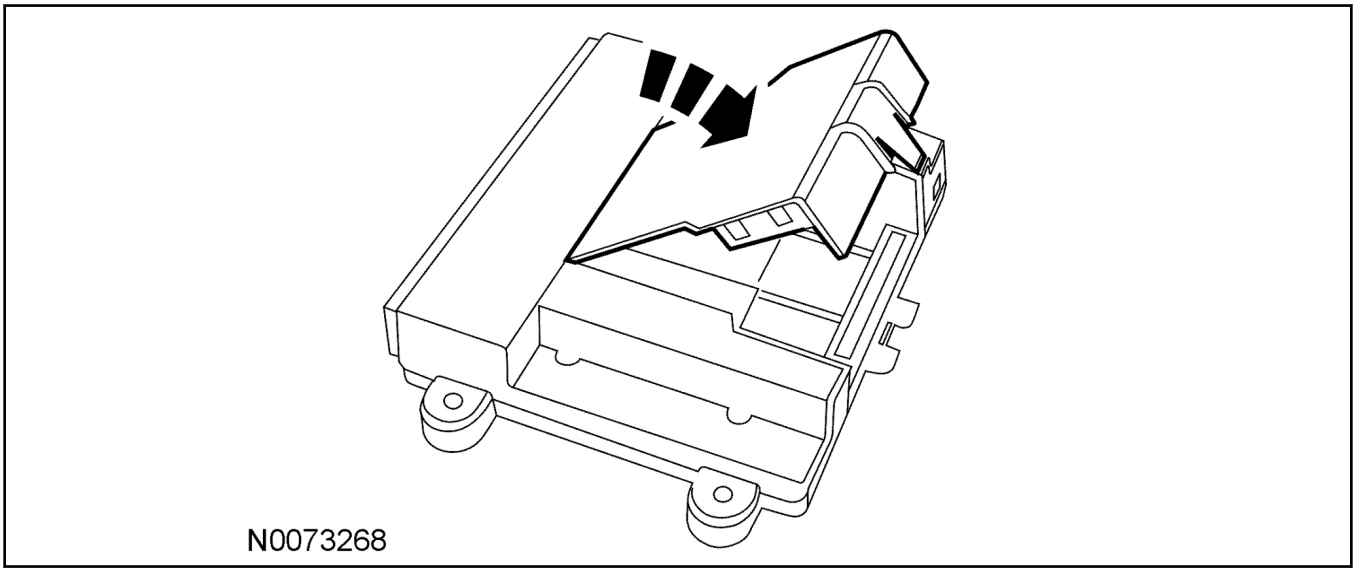
INSTALLATION (Continued)

Module Preparation

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

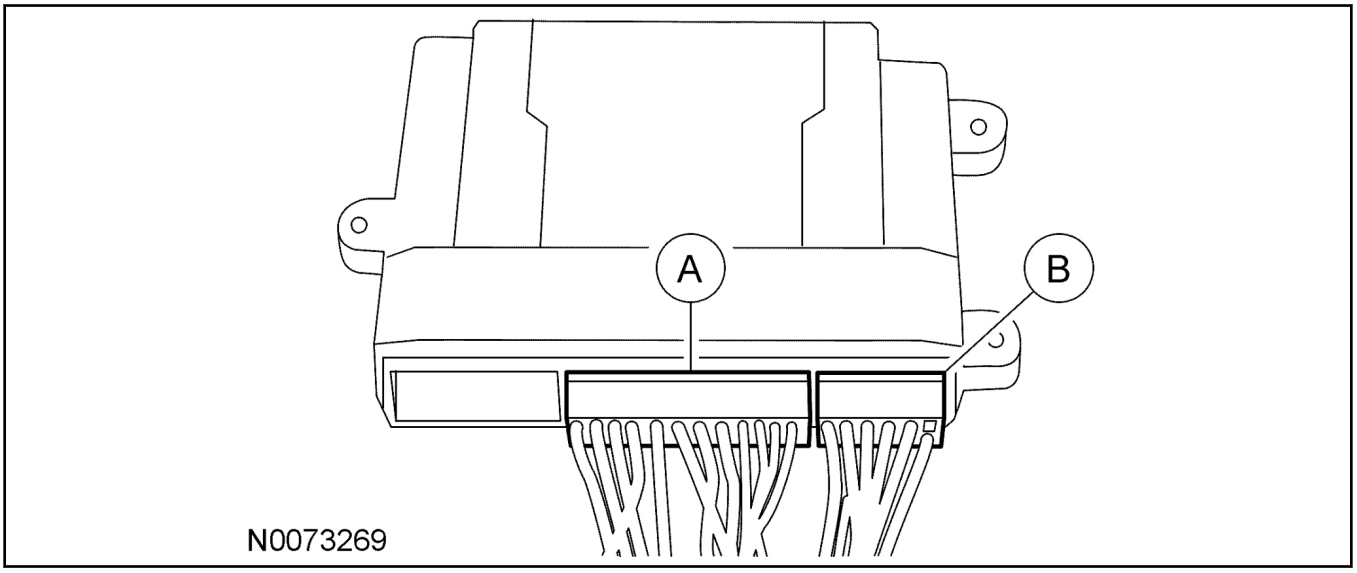


5. Place the software cartridge onto the RMST control module.



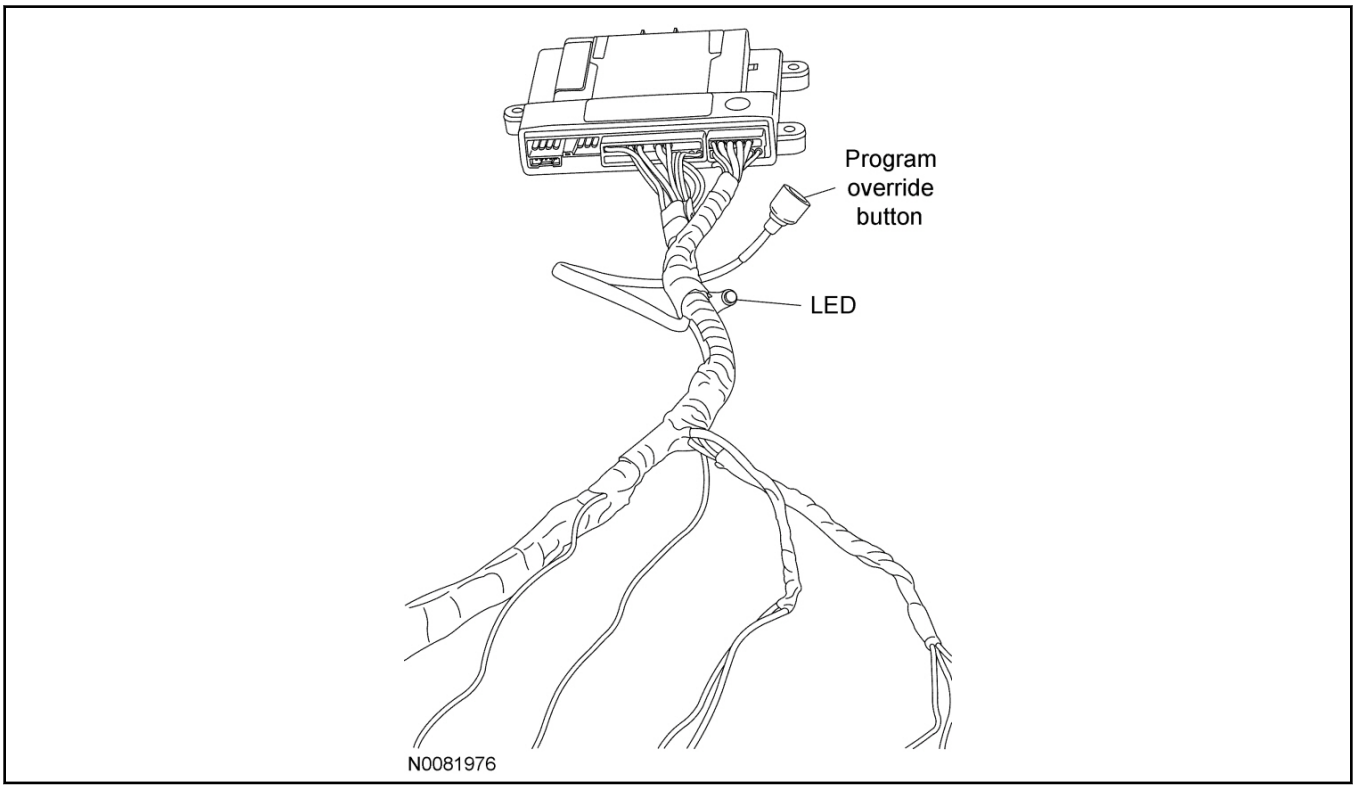
6. Plug the wiring harness(es) into the module.
   - A - Harness: 24-way, used on all systems.
   - B - Harness: 10-way, used on all systems with RMST.

INSTALLATION (Continued)



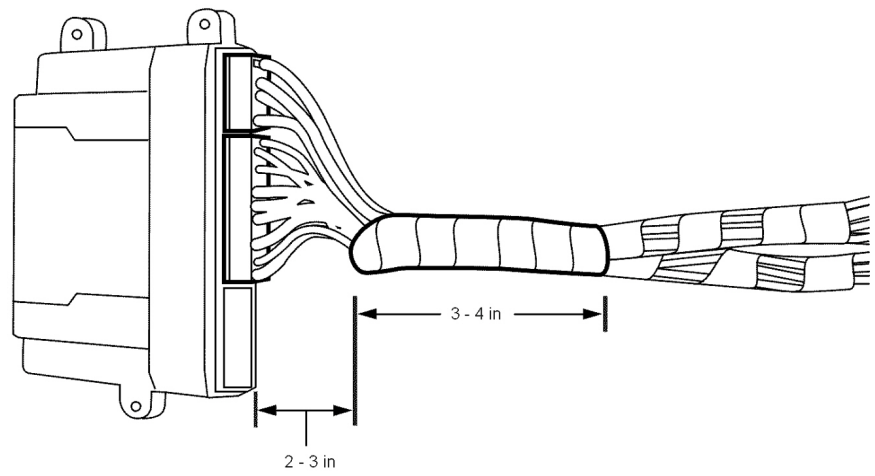
7. **NOTE:**
   Do not cut the override programming button from the harness, it is used for all installations.

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



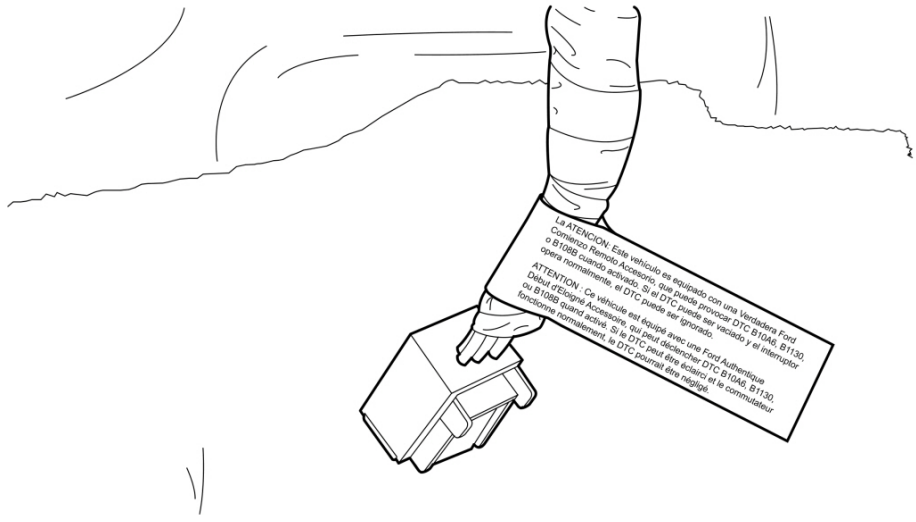
INSTALLATION (Continued)

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



Vehicle Preparation

9. Remove the retainers and the upper and lower steering column shrouds.
10. Open and remove the glove box.
11. Remove the RH lower Instrument panel insulator.
12. Using a suitable non-marring tool, work around the outer edge of the headlamp switch to release the clips and pull the switch out through the front of the finish panel.
    - Disconnect the electrical connector.
13. Install the supplied wire harness label to the headlamp switch harness.
    - If required, fish the headlamp switch wire harness out of the instrument panel.



14. Connect and install the headlamp switch.

Antenna Mounting

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

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

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

15. Choose a suitable mounting location based on the guidelines above.

Install The Antenna

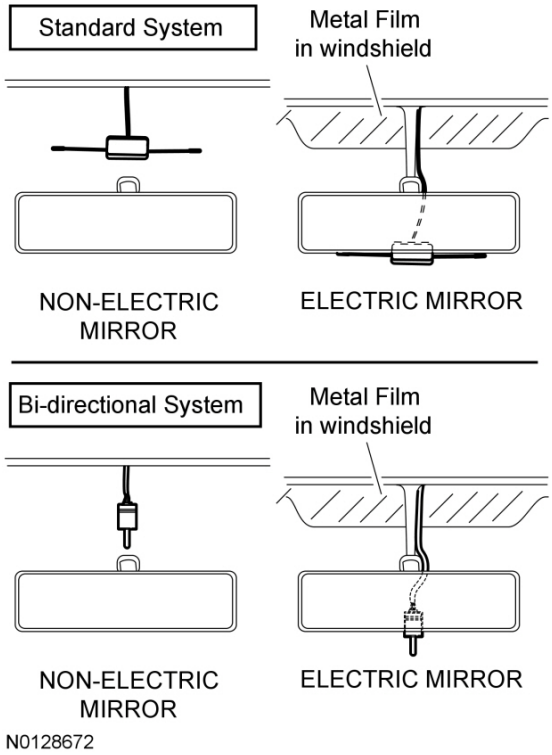
16. Clean the mounting surface using an alcohol base solution and a clean cloth.
17. **NOTE:**
    Do not touch the adhesive, reduced adhesion may result.

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

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

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

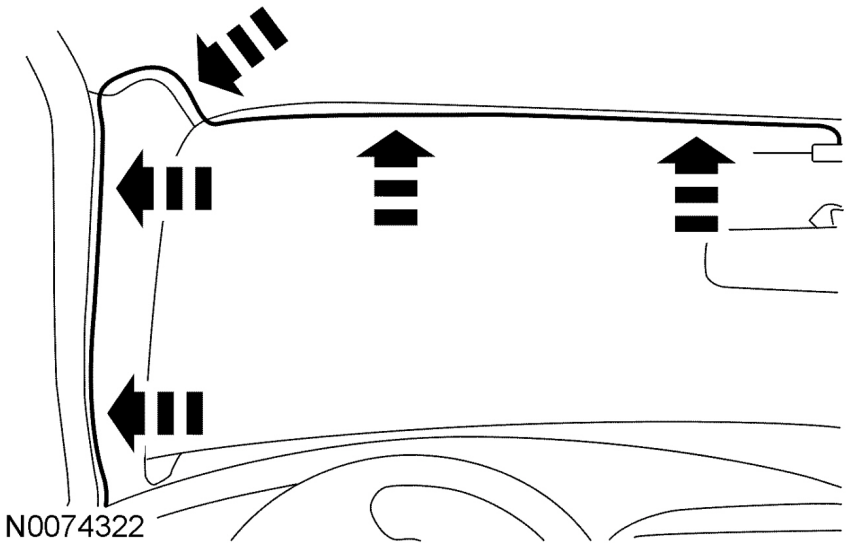
INSTALLATION (Continued)



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

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

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



20. Reposition the A-pillar trim panel back, if necessary.

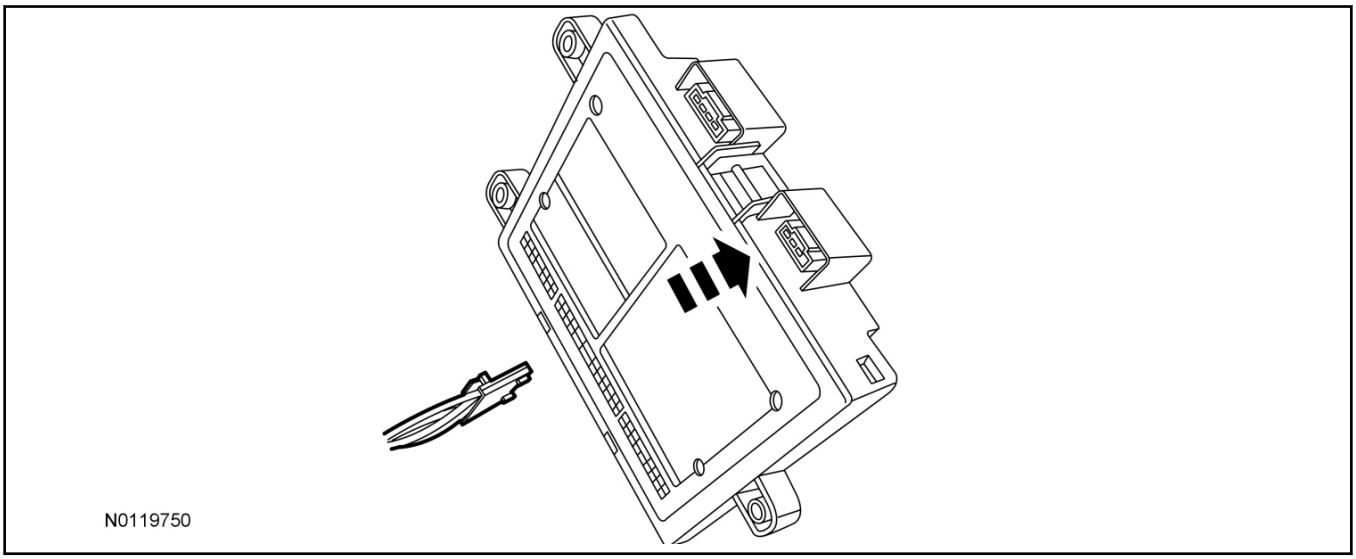
Install the Remote Start Control Module and Harness Assembly

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

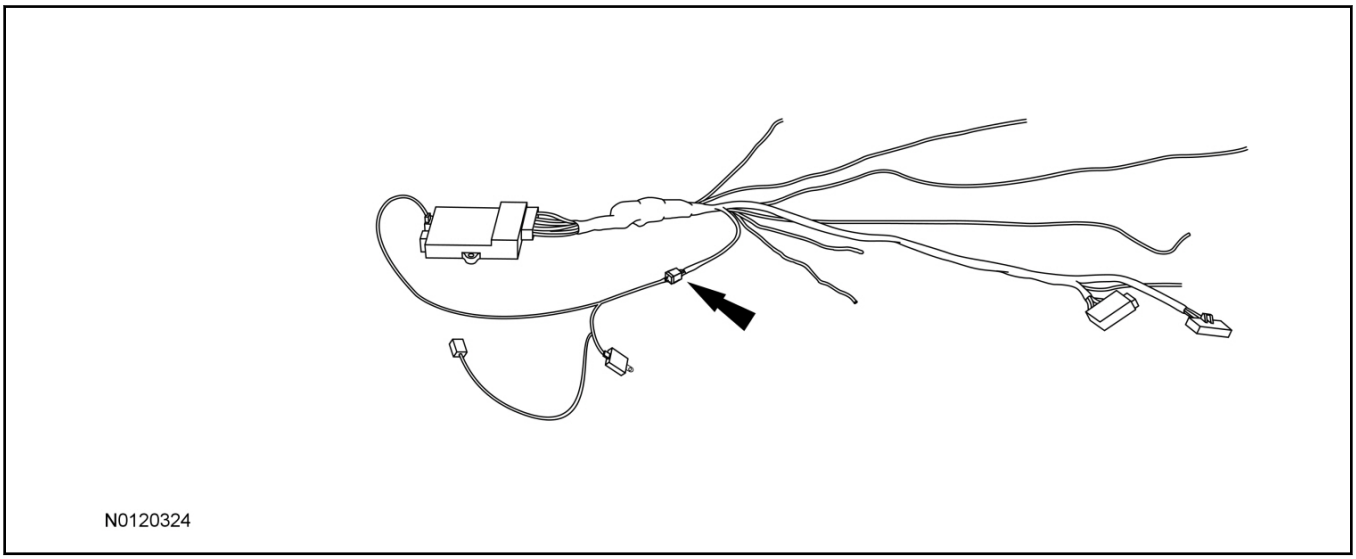
INSTALLATION (Continued)

Install the DNA-9 Relay Harness and Module

22. Disconnect the Passive Anti-Theft System (PATS) transceiver electrical connector.
23. Connect the DNA-9 relay harness to the PATS transceiver electrical connector and to the vehicle harness.
24. Connect the DNA-9 relay harness to the remote start module.



25. Connect the DNA-9 Module to the relay harness.
    - Secure to the steering column wire harness with tie-straps.
26. Connect the DNA-9 relay harness to the 2-pin connector on the remote start module harness.

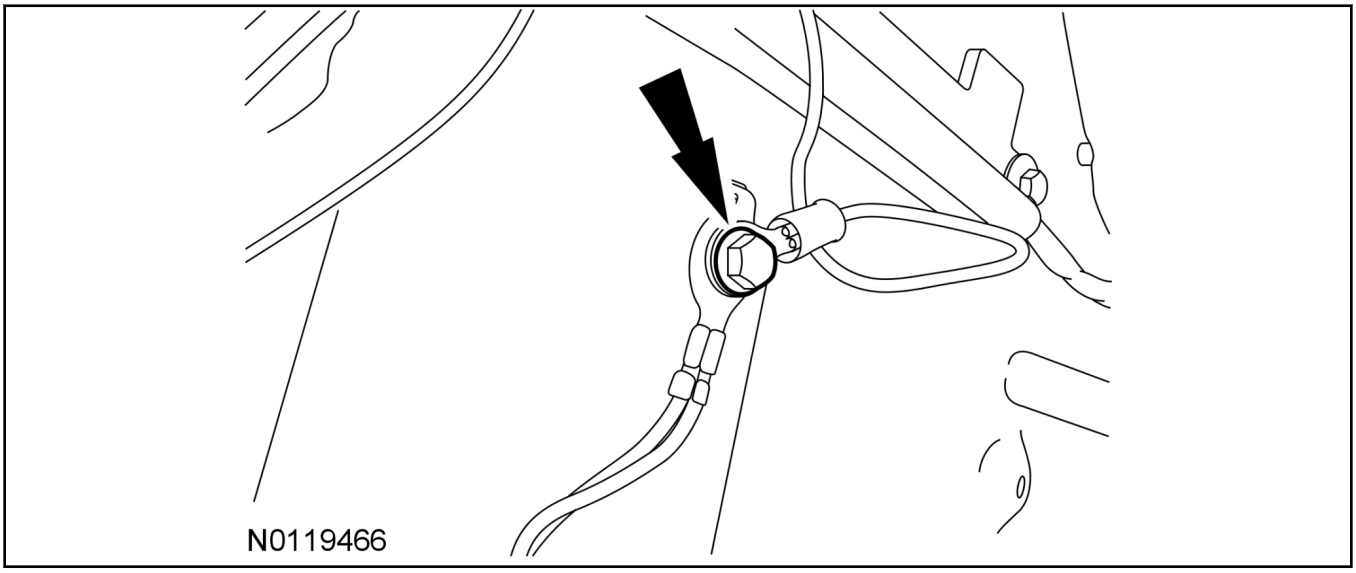


Identify Circuit Wires For Connections

NOTE:
It is recommended to identify all vehicle wires that will be connected before making any permanent connections. If all wires cannot be located, call 1-800-FORDKEY.

INSTALLATION (Continued)

27. Connect the Black ground wire from the remote start module harness to the chassis ground point on the driver's side.
    - Chassis ground points are located near the driver's side sill plate.



28. Disconnect the ignition switch electrical connector.
29. Connect the remote start harness hard shell connectors to the ignition switch and ignition switch connector.
30. **NOTE:**
    A DVOM connected to the correct wire will show ~12V, then show ~0V when the horn button is held.
    A logic probe will show power on the correct wire, then show ground when the horn button is held.

    Identify the Brown horn circuit wire in the steering column harness.
31. Connect the Brown/Black wire from the remote start module harness to the Brown horn circuit wire in the steering column harness.
32. **NOTE:**
    This circuit should be tested with ignition OFF.

    NOTE:
    A DVOM connected to the correct wire will show ~.7V, then show ~.8V when the door lock switch is pressed.
    A logic probe will show power on the correct wire, then continue to show power when the door lock switch is pressed.

    Identify the Yellow/Gray power door lock circuit wire at the Body Control Module (BCM) connector C2280G pin 10.
33. Connect the Blue wire from the remote start module harness to the Yellow/Gray power door lock circuit wire at the BCM connector C2280G pin 10.

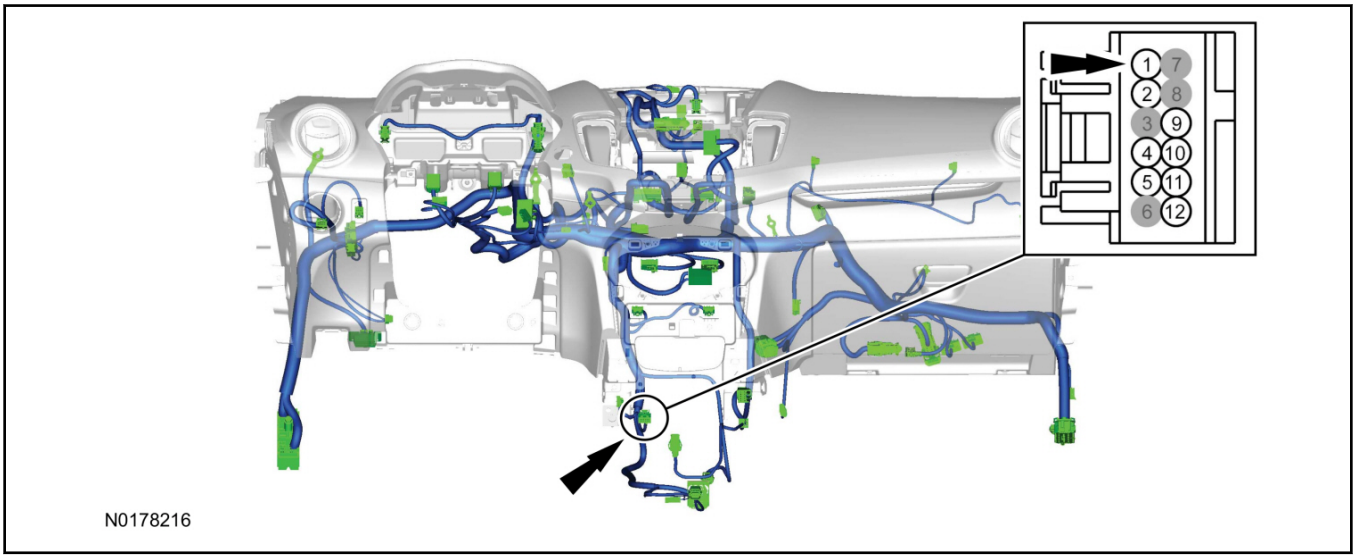
INSTALLATION (Continued)

34. **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 Blue/Gray brake switch circuit wire at the transmission selector lever connector pin 1.

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

    Identify the Blue/Gray brake switch circuit wire at the transmission selector lever connector pin 1.



36. Connect the Brown wire from the remote start module harness to the Blue/Gray brake switch circuit wire at the at the transmission selector lever connector pin 1.

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

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

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

    Identify the Yellow/Gray dome light circuit wire at the BCM connector C2280C pin 5.

38. Connect the Green/Violet wire from the remote start module harness to the Yellow/Gray dome light circuit wire at the BCM connector C2280C pin 5.

39. **NOTE:**
    A DVOM connected to the correct wire will show ~1V, when doors are unlocked (lock LED OFF), then show power when doors are locked (lock LED ON).
    A logic probe will show open on the correct wire when doors are unlocked (lock LED OFF), then show power when doors are locked (lock LED ON).

    Identify the Green/Violet door lock circuit wire at the BCM connector C2280E pin 12.

40. Connect the White/Blue wire from the remote start module harness to the Green/Violet door lock circuit wire at the BCM connector C2280E pin 12.

41. **NOTE:**
    A DVOM connected to the correct wire will show ~.7V with the parking light switch OFF, then show ground with the parking light switch ON.

    NOTE:
    A Logic probe will show power with the parking light switch OFF and ground with the parking light switch ON.

    Identify the Yellow/Blue parking lights circuit wire at the headlamp switch.

42. Connect the White wire from the RMST module harness to the Yellow/Blue parking lights circuit wire at the headlamp switch.

Install The Hood Safety Switch

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

    NOTE:
    Using a piece of convolute adds to 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 to the left of the driver side hood hinge and install the hood safety switch using the supplied metal screws.

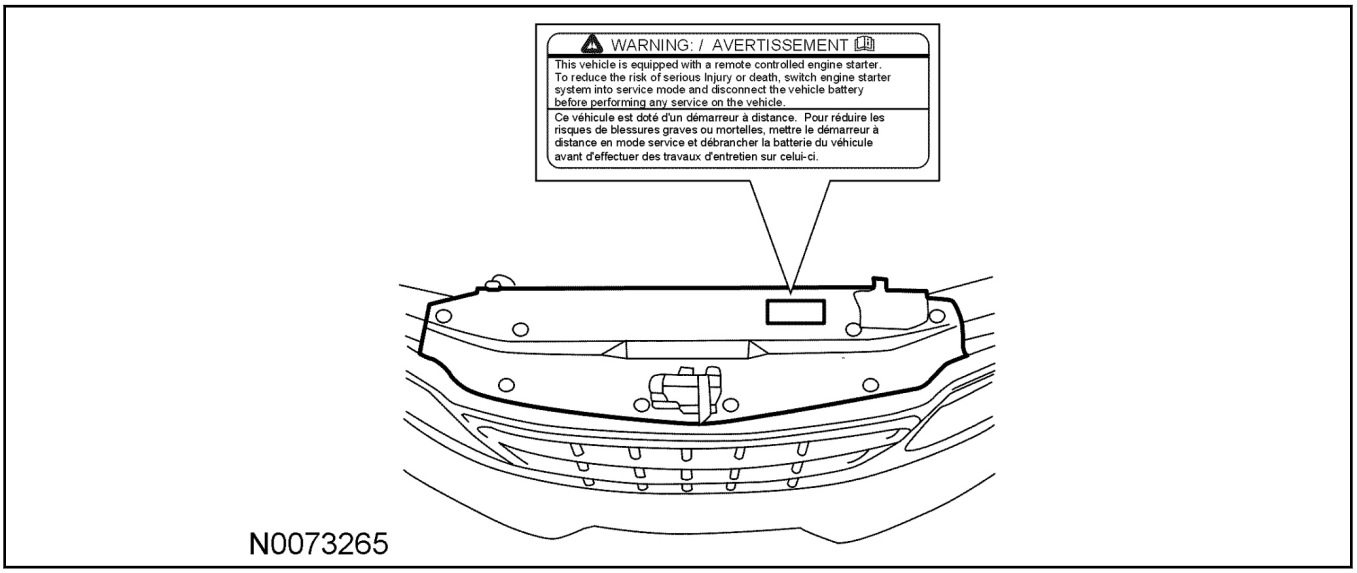
44. Apply rustproofing compound PM-13A to the drilled hole and tighten the screw to 1 Nm (10 lb-in).

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

INSTALLATION (Continued)

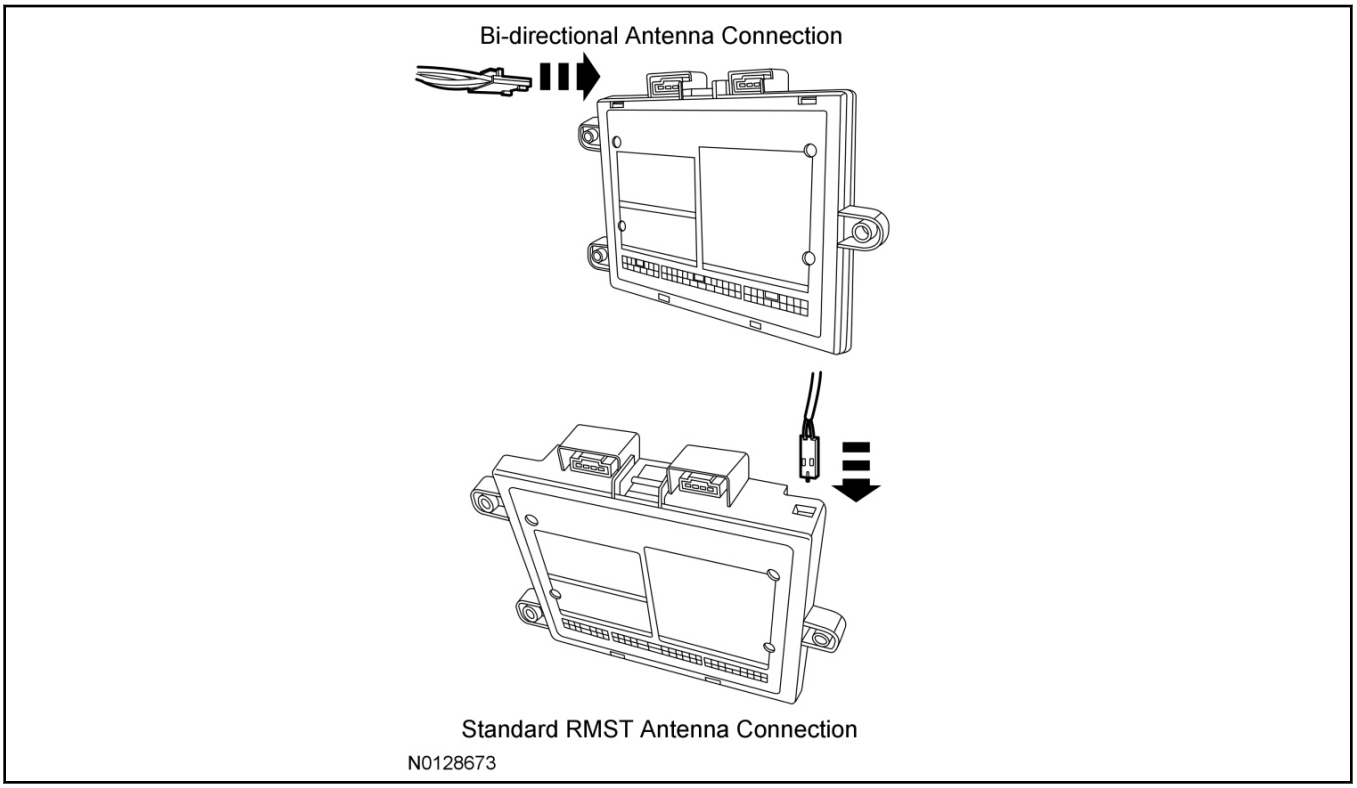
46. **NOTE:**
    Place the label on the radiator fan shroud or similar area.

    Install the underhood warning label.



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

48. Connect the antenna to the RMST control module.



Program The RMST System

49. Refer to the RMST programming section for this vehicle.

INSTALLATION (Continued)

Secure RMST Harness and Control Module

50. Use the supplied tie wraps to secure the RMST harness wires.
51. **NOTE:**

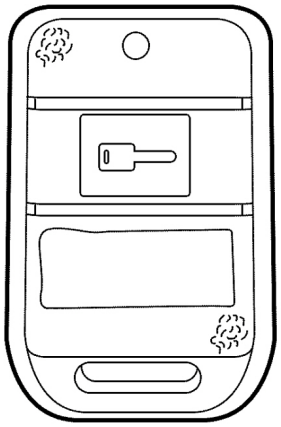
    Do not mount the control module in the knee bolster area.
    Secure the control module at three points to the vehicle.

    Use the supplied long tie wraps to mount the RMST control module to the underdash wiring harness, to the left of the steering column.

Install Trim

52. Install the upper and lower steering column shrouds.
    Install the retainers.
53. Install the glove compartment.
54. Install the RH lower instrument panel insulator.

Programming - Standard Remote Start



STANDARD RMST FOB

N0097291

55. Use the following guidelines for programming the RMST system.
    - If the remote start options (Key-in sense polarity, door ajar polarity, or tach mode) are not programmed correctly, vehicle will not remote start or operate properly.
    - Make sure that the hood and doors are closed before proceeding.
    - The LED on the remote start harness must be visible to complete module programming.
    - The remote start override button must be accessible.

Programming Options: Entering Programming Mode

56. See chart below for programming information.

Program Bank 2 Chart (5 Honks)

BANK	OPTIONS	DESCRIPTION	LED
2	1	TACHLESS MODE	ON

INSTALLATION (Continued)

57. Press and hold the brake pedal.
58. Turn the ignition key to the RUN position.
    - The dome light will turn off.
59. 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. Release the brake pedal and the RMST override button.
60. Press and release the override button. The horn will honk 4 times indicating the system has entered the first program bank. If not, check the following:
    - Brake pedal switch wire solder connection
    - Hood closed and Gray hood safety switch wire solder connection
    - All doors closed and dome light circuit wire solder connections
    - The key is in the RUN position
    - The software cartridge is firmly seated in the RMST module
    - The RMST harness connections are firmly seated in the RMST module

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

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

NOTICE:
When turning LED on or off using remote start fob button, quickly press and immediately release the remote start button. Failure to quickly release the remote start fob button will result in system defaulting to the factory options.

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

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

NOTE:
The remote start module is now programmed.

64. Remove the ignition key.

INSTALLATION (Continued)

Programming the DNA-9

NOTE:
DNA-9 module programming must be completed with the driver door open.

NOTE:
Two PATS keys are required to program the DNA-9.

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

65. With all doors closed, insert the first ignition key and turn to the RUN position.
    - Leave key on for 5 seconds, turn off and remove.
66. Insert the second ignition key and turn to the RUN position.
    - Leave key on for 5 seconds, turn off and remove.
67. Press and hold the remote start button for 3 seconds.
    - Verify the vehicle is started and remains running until the brake pedal is pressed or the door is opened.

NOTE:
If the vehicle fails to start, repeat steps 1-3 and reprogram.

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

Functional Test - Standard Remote Start

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

68. Make sure all doors are closed but hood is open and windows are down (doors will be locking).
69. 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.
70. The remote start systems should turn on the ignition, but then honk the horn twice and shut down indicating the hood is open.
71. Close the hood and insert a key into the ignition switch.
72. Attempt to re-start the vehicle again using the key fob.
73. 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.

INSTALLATION (Continued)

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

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

82. See the Remote Start System Diagnosis Guide to resolve issues identified by the functional test.

Troubleshooting

83. **NOTE:**
    When attempting to remote start the 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 with several horn "chirps" to help 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 does not start and the horn "chirps" 3 times, there is a fault - "Vehicle Door is Open".

CHIRPS	PROBLEM
1 Chirp	DNA-9 not programmed correctly, or the DNA-9 harness is damaged.
2 Chirps	BRAKE is being pressed, or the HOOD is open.
3 Chirps	One of the vehicle DOORS is open.
4 Chirps	TACH not programmed.
5 Chirps	The KEY is in the ignition.
6 Chirps	The remote start system is in SERVICE/VALET mode.

INSTALLATION (Continued)

Programming Bi-directional Remote Start

BI-DIRECTIONAL FOB

N0128674

84. Use the following guidelines for programming the RMST system.
    - If the remote start options (Key-in sense polarity, door ajar polarity, or tach mode) are not programmed correctly, vehicle will not remote start or operate properly.
    - Make sure that the hood and doors are closed before proceeding.
    - The LED on the remote start harness must be visible to complete module programming.
    - The remote start override button must be accessible.

Programming Options: Entering Programming Mode

85. See chart below for programming information.

Program Bank 2 Chart (5 Honks)

BANK	OPTIONS	DESCRIPTION	LED
2	1	TACHLESS MODE	ON

86. Press and hold the brake pedal.
87. Turn the ignition key to the RUN position.
    The dome light will turn off.
88. Press and hold the remote start system override button for at least 10 seconds.
    After 10 seconds the horn will honk 3 times, indicating the system is now in the learn mode.
    Release the brake pedal and the RMST override button.
89. Press and release the override button. The horn will honk 4 times indicating the system has entered the first program bank.
    If not, check the following:
    - Brake pedal switch wire solder connection
    - Hood closed and Gray hood safety switch wire solder connection
    - All doors closed and dome light circuit wire solder connections
    - The key is in the RUN position
    - The software cartridge is firmly seated in the RMST module
    - The RMST harness connections are firmly seated in the RMST module

INSTALLATION (Continued)

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

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

NOTICE:
When turning LED on or off using remote start fob button, quickly press and immediately release the remote start button. Failure to quickly release the remote start fob button will result in system defaulting to the factory options.

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

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

NOTE:
The remote start module is now programmed.

93. Remove the ignition key.

Programming the DNA-9

NOTE:
Two PATS keys are required to program the DNA-9.

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

94. Insert the first ignition key and turn to the RUN position.
    - Leave key on for 5 seconds then turn off and remove key.
95. Insert the second ignition key and turn to the RUN position.
    - Leave key on for 5 seconds then turn off and remove key.

INSTALLATION (Continued)

NOTE:
If the PATS light blinks rapidly, repeat steps 1-3 to retry programming the DNA-9.

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.

96. Press the remote start button key icon twice within 3 seconds.
    The PATS light should stay on for 3-5 seconds before turning off, which means that the DNA-9 was successfully programmed.

Functional Test - Bi-directional Remote Start

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

97. Make sure all doors are closed but hood is open and windows are down (doors will be locking).
98. Press the Start button on the remote control key fob twice within 3 seconds - horn should honk once indicating receipt of the start request.
99. The remote start systems should turn on the ignition, but then honk the horn twice and shut down indicating the hood is open.
100. Close the hood and insert a key into the ignition switch.
101. Attempt to re-start the vehicle again using the key fob.
102. 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.
103. Remove the key and open a door.
104. Attempt to re-start the vehicle again using the key fob.
105. The remote start systems should turn on the ignition, but then honk the horn three times and shut down indicating a door is open.
106. Close the door.
107. Attempt to re-start the vehicle again using the key fob..
108. Once the vehicle starts, verify that all heat and A/C functions operate normally and that the doors have locked.
109. On vehicles equipped with power window interrupt, attempt to close the windows to check power window interrupt function.
110. Once all systems have been checked, open the door*, or press the brake pedal - the remote start systems should shut down.

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

111. See the Remote Start System Diagnosis Guide to resolve issues identified by the functional test.

Troubleshooting

112. **NOTE:**
When attempting to remote start the 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 with several horn "chirps" to help 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 does not start and the horn "chirps" 3 times, there is a fault - "Vehicle Door is Open"

CHIRPS	PROBLEM
1 Chirp	DNA-9 not programmed correctly, or the DNA-9 harness is damaged.
2 Chirps	BRAKE is being pressed, or the HOOD is open.
3 Chirps	One of the vehicle DOORS is open.
4 Chirps	TACH not programmed.

2018 Fiesta - Key Start

TYPE "A" CUSTOM WIRE HARNESS

RMST MODULE WIRE HARNESS

STEERING COLUMN HARNESS

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

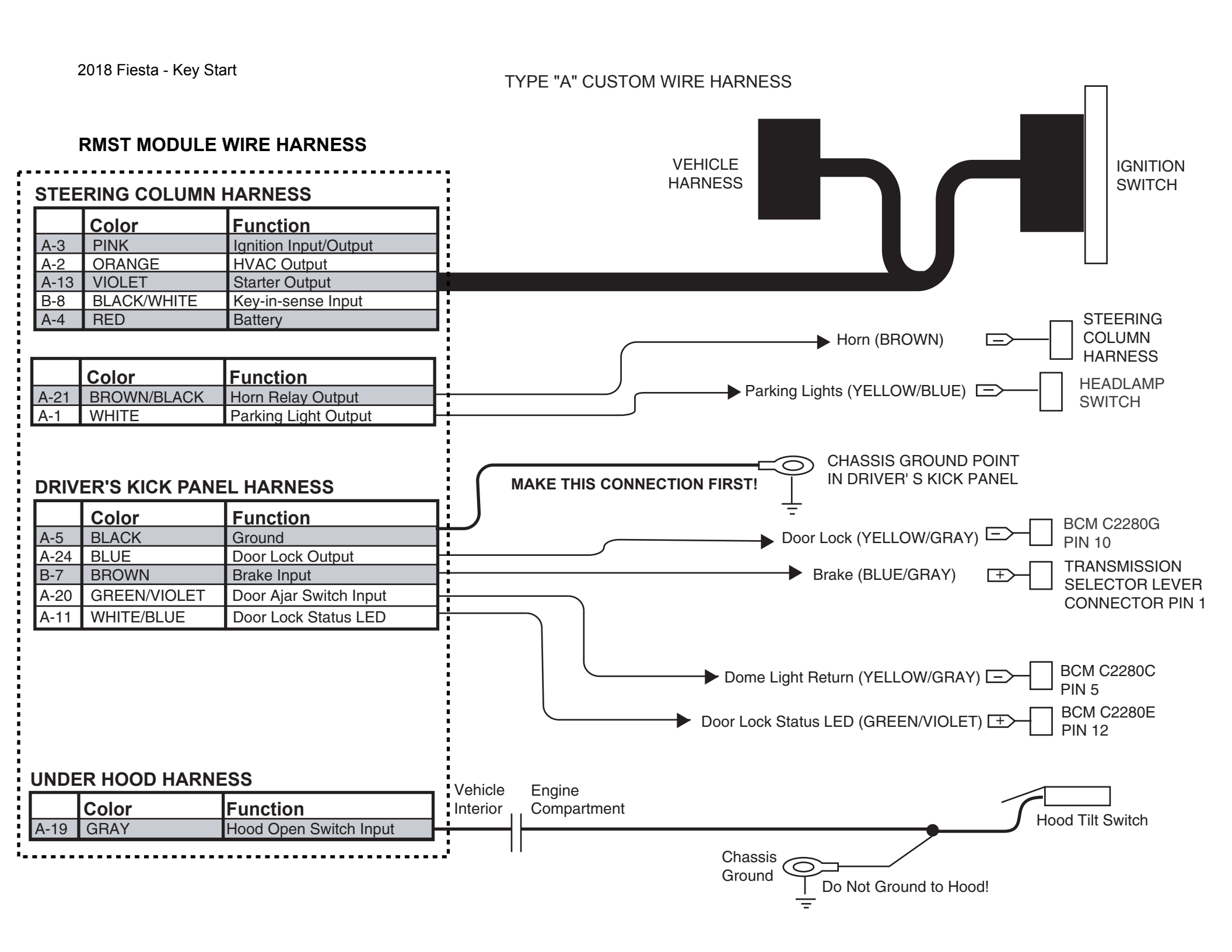
	Color	Function
A-21	BROWN/BLACK	Horn Relay Output
A-1	WHITE	Parking Light Output

DRIVER'S KICK PANEL HARNESS

	Color	Function
A-5	BLACK	Ground
A-24	BLUE	Door Lock Output
B-7	BROWN	Brake Input
A-20	GREEN/VIOLET	Door Ajar Switch Input
A-11	WHITE/BLUE	Door Lock Status LED

UNDER HOOD HARNESS

	Color	Function
A-19	GRAY	Hood Open Switch Input



Body Control Module (BCM)