Vehicle Security / Remote Start / Remote Access System Installation

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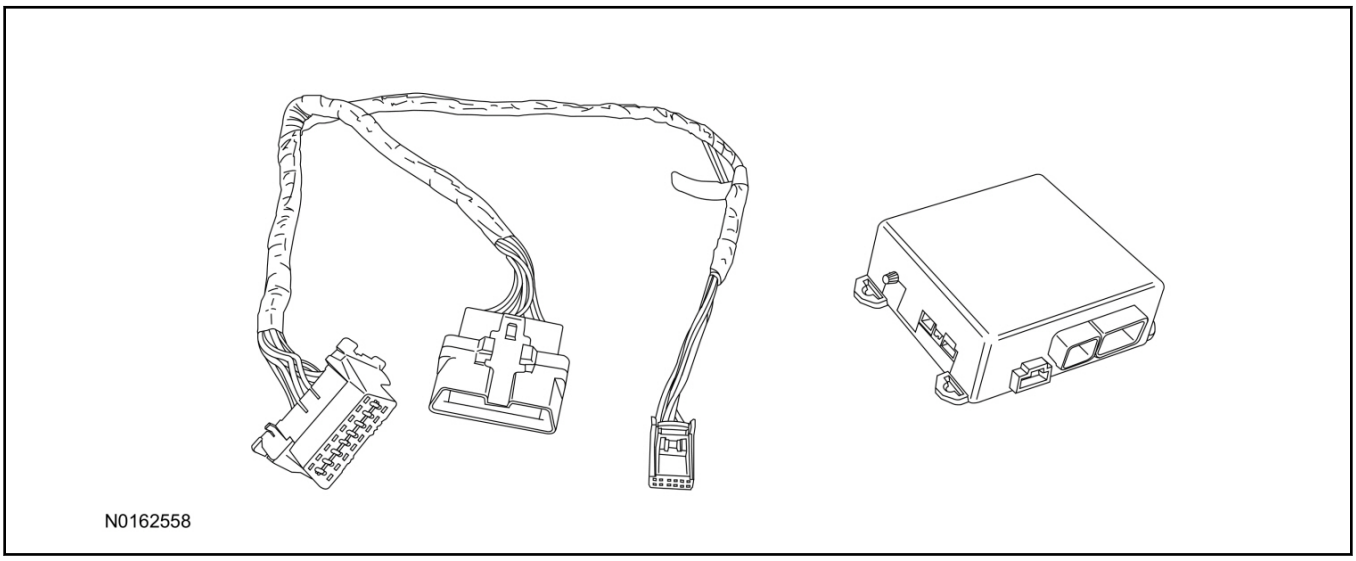
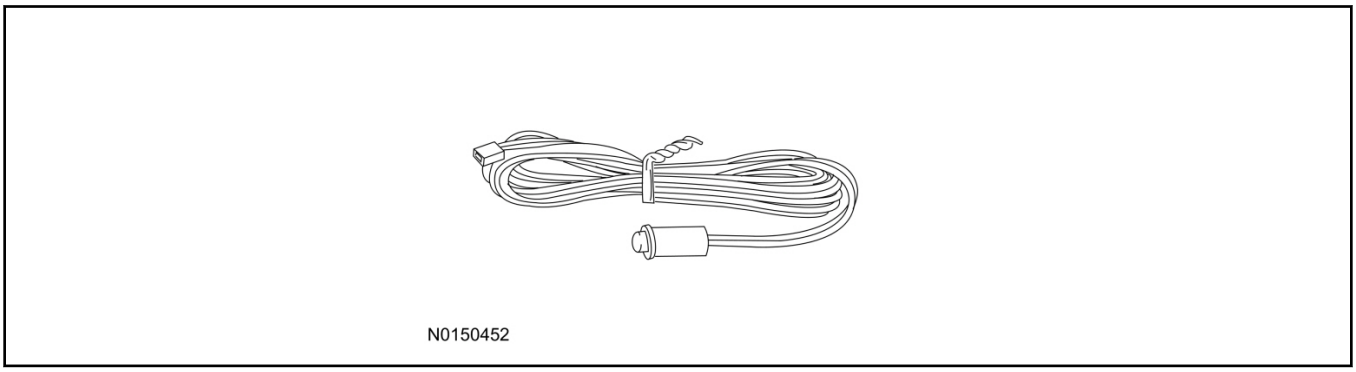
INSTALLATION

Vehicle Security / Remote Start / Remote Access - Edge/MKX

VSS System Components



Security Indicator LED (19D596) "Optional"



Edge/MKX

1. Verify correct kit number.

Review VSS Kit Contents

NOTE:
Kits are vehicle specific and are not interchangeable.

2. Review the VSS kit contents.

Vehicle Security System (VSS) Kit

QUANTITY	DESCRIPTION
1	VSS Module
1	T-harness

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INSTALLATION (Continued)

Vehicle Security System (VSS) Kit(Continued)

6	Tie-straps
1	Owner's Manual

Security Indicator LED Kit Contents "Optional"

3. Review the Security Indicator LED kit contents.

Security Indicator LED Kit

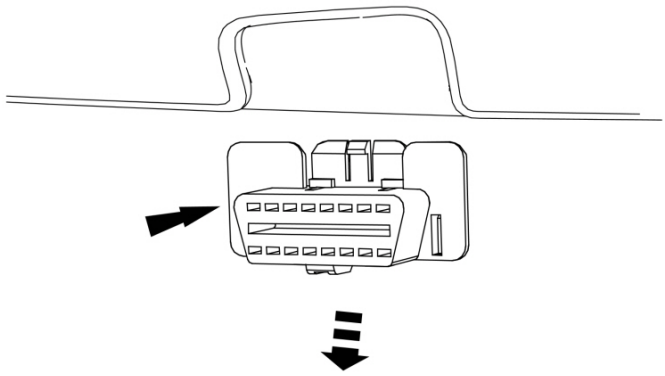
QUANTITY	DESCRIPTION
1	Security Indicator LED

I. VSS System Installation

⚠ **CAUTION:**
Carefully route and secure module and harnesses so that they do not interfere with moving parts or linkages.

NOTE:
If the VSS kit was installed previously and the vehicle is being upgraded, proceed to the "RMST" or "RMU" upgrade section(s).

4. Remove the OBD II port from the IP frame.



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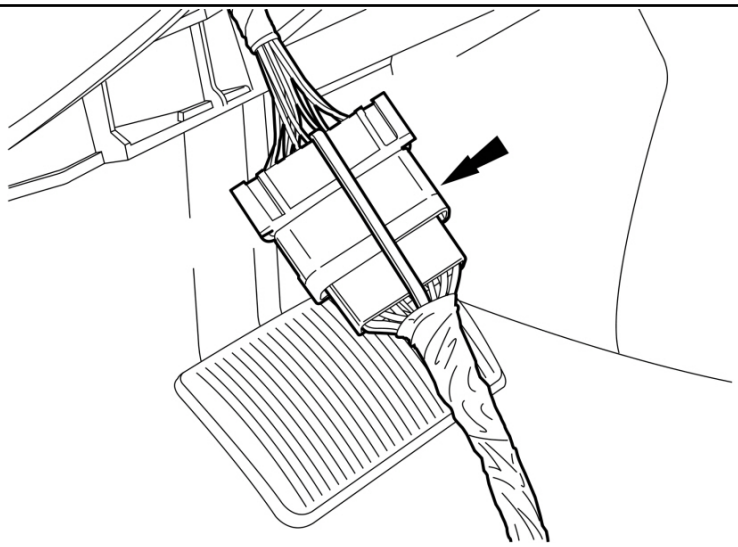
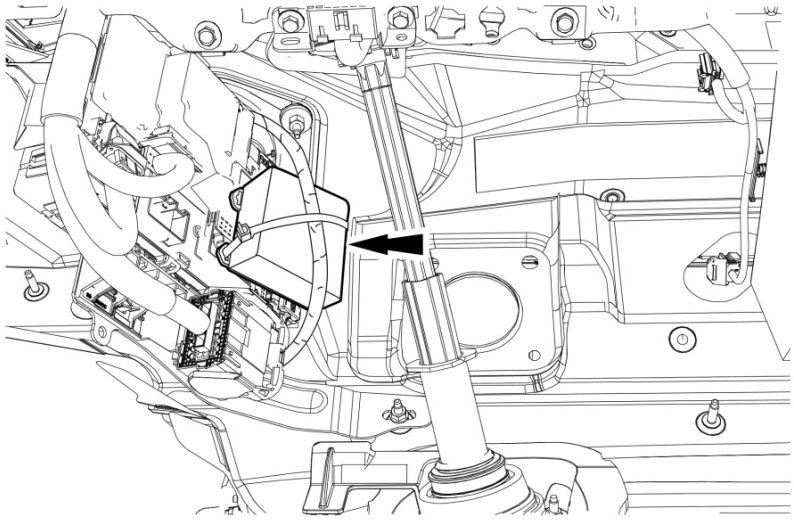
INSTALLATION (Continued)

5. Connect the VSS T-harness to the OBD II port.
   - Secure the T-harness to the OBD II port using a tie-strap.



6. Position the VSS harness inside the IP being careful to avoid sharp edges and moving parts.
7. Install the new VSS harness OBD II port to the IP frame.
8. Position the VSS module on top of the Body Control Module (BCM) and secure to wire harness with tie-straps.
   - Ensure the VSS module is positioned so the shock sensor adjustment knob can be accessed for later use.
   - Ensure the tie-strap is routed through the VSS module loops at opposite corners.



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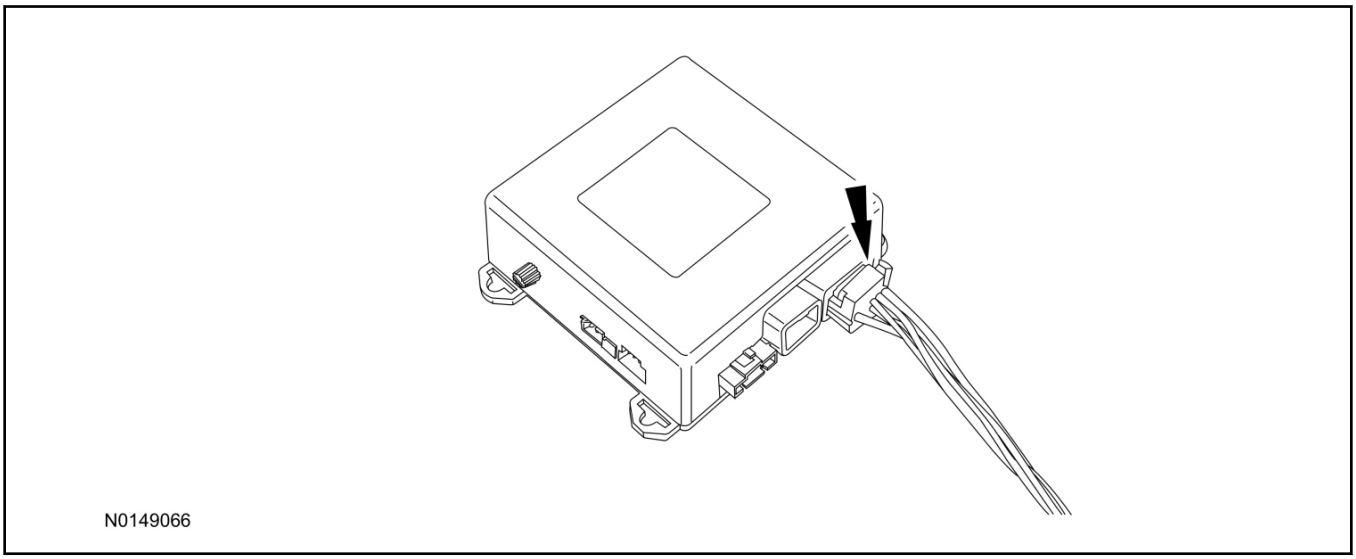
INSTALLATION (Continued)

9. Connect the VSS harness to the VSS module.
    - Secure the VSS harness with tie-straps.



Optional Security Indicator LED Mounting

⚠ **CAUTION:**
Carefully route and secure module and harnesses so that they do not interfere with moving parts or linkages.

10. Keep the following points in mind when routing or positioning the LED for mounting:
    - Have at least 3/4" clearance behind trim panels for the wiring harness to be routed.
    - The LED should be clearly visible from the driver's side window when mounted.
    - Do not mount the LED on trim panels that cover air bags.
11. Mount the LED at an appropriate location on the upper steering column shroud, using the guidelines listed above.
    - Drill a 9/32" hole into the selected location, for the LED to mount in.
12. Route the LED wire harness to the VSS module.
13. Connect the LED wire harness to the VSS module 2-pin white connector.
    - Secure the LED wire harness with tie-straps.

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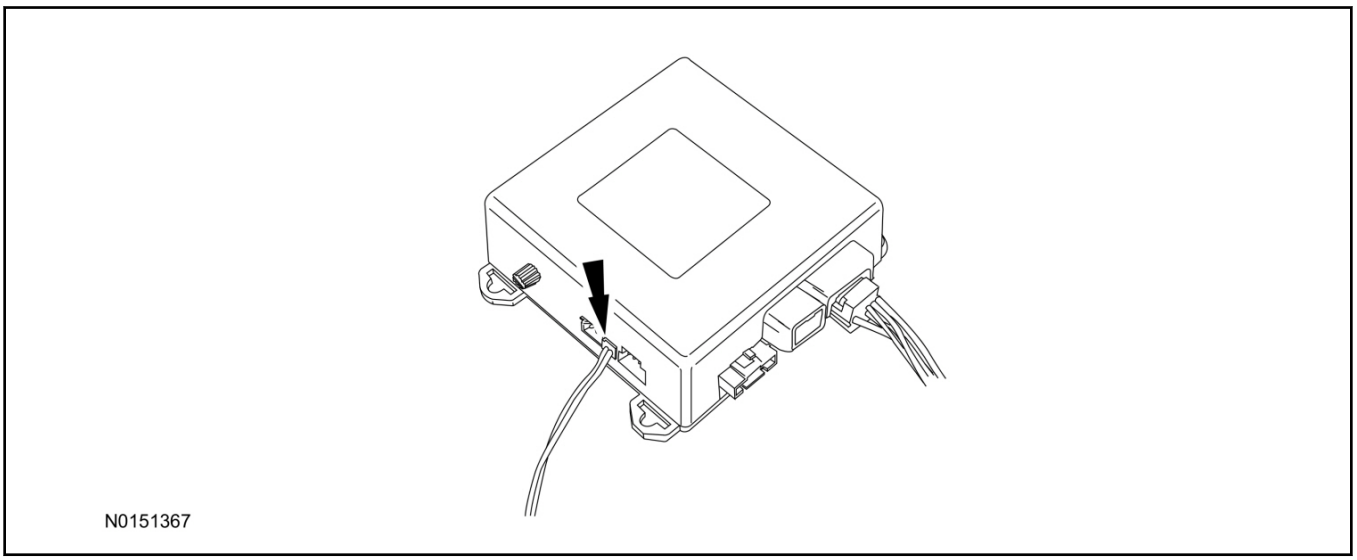
INSTALLATION (Continued)



Learn VSS to Vehicle (Push Button Start Vehicles Only)

14. Cycle door locks at trim switch four times to learn remote start keyless functions.

Learn VSS to Vehicle (Key Start Vehicles Only)

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

15. Press the vehicle's unlock button located on the driver's door. Make sure all doors are unlocked.
16. Put the key in the ignition.
17. Cycle eight times rapidly (within 10 seconds) between the 1 (OFF/LOCK) position and 3 (ON) position.
    - The eighth turn must end in the 3 (ON) position. The doors will lock, then unlock, to confirm that the programming mode has been activated.
18. Wait for 10 seconds and the remote start module will program itself to the system.
    - After 20 seconds, you will automatically exit the programming mode. The doors will lock, then unlock, to confirm that the programming mode has been exited.
19. If equipped with additional accessories (i.e. RF keypad), verify that they maintain all functionality post installation.

Shock Sensor Sensitivity Adjustment

NOTE:
The VSS module is equipped with an internal dual zone Shock Sensor. The VSS system will activate a single horn honk/single light flash anytime a light to moderate impact is detected, and a "panic" type 30 second horn honk/light flash sequence when a heavy impact is detected while the VSS system is armed. Adjustment of both zones is accomplished through a single adjustment knob on the VSS module. Rotating the knob clockwise will increase sensitivity and rotating the knob counter-clockwise will decrease sensitivity. Sensitivity adjustment must be completed with the module securely mounted and the adjustment knob accessible.

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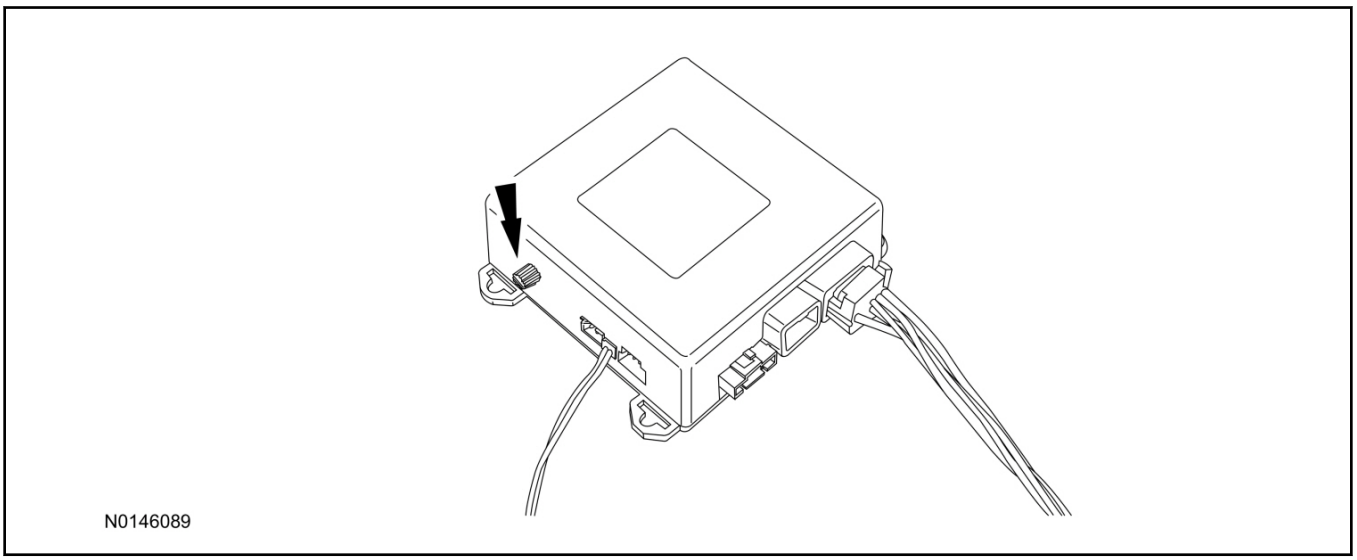
INSTALLATION (Continued)



20. Starting with the adjustment knob in approximately the halfway position, lower the driver's window and exit the vehicle.
21. Press the LOCK button on the vehicle's RKE fob to arm the VSS system. The LED will light solid for 20 seconds and then begin to flash a steady on/off sequence to indicate the system is armed.
22. Using a closed fist, impact the steering wheel with moderate force to simulate a light impact on the vehicle. If the impact is detected, the horn will honk and the lights will flash 1 time to indicate the warning impact was detected.
23. Using a closed fist, impact the steering wheel with heavy force to simulate a hard impact (i.e. glass breakage) on the vehicle. If the impact is detected, the horn will honk and the lights will flash a steady on off sequence to indicate the heavy or full shock trigger was detected.
24. Increase (rotate clockwise) or decrease (rotate counter-clockwise) the adjustment knob as necessary to achieve desired sensitivity, repeat the previous steps to test, and verify adjustment.

VSS Functional Test

NOTE:
If installed, observe the LED while performing these tests.

25. Lower the driver's door window, then close all doors, hood, and trunk/hatch and press lock on the keyfob. The LED should stay lit for 20 seconds while the VSS system pre-arms, after which it will flash every 3-4 seconds in fully armed mode.
26. Reach inside the window hit the door unlock trim switch. The LED should continue to flash, indicating that the vehicle is still armed. Use the inside driver's door handle to open the door. The alarm should sound, indicating perimeter breach. Turn the alarm off by turning the ignition to "On".
    - If equipped with OE perimeter security, there will be a 12 second interior chime prior to alarm sounding. For vehicles not equipped with OE perimeter security, there will be a 12 second delay with no interior chime prior to alarm sounding.
    - For push button start vehicles, the Intelligent Access (IA) key must be away from the vehicle, otherwise the security system may disarm immediately upon trigger.

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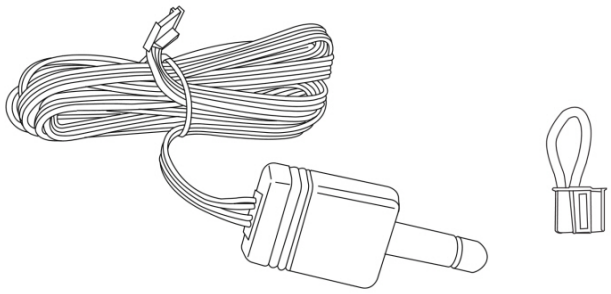
INSTALLATION (Continued)

27. Exit the vehicle and arm it again, this time leaving the driver's door open. The vehicle should arm itself, ignoring the open door but monitoring the rest. Once the vehicle is armed, shut the driver's door and reopen it after a few seconds. The alarm should sound. Turn the alarm off by hitting unlock on the keyfob.
    - For push button start vehicles, the Intelligent Access (IA) key must be away from the vehicle, otherwise the security system may disarm immediately upon trigger.
28. Test all other vehicle doors, the hood and the trunk in the same manner, by setting off the alarm and disarming with the keyfob.
29. **Please contact 1-800-FORD-KEY with any issues regarding hardware or kit contents.**

II. Remote Start (RMST) Upgrade - Antenna Kit "Sold Separately"

⚠ **CAUTION:**
Carefully route and secure module and harnesses so that they do not interfere with moving parts or linkages.

NOTE:
Verify that the vehicle has a hood switch Installed. If the vehicle is not equipped with a hood switch refer to **"Hood Switch Kit - Sold Separately"**.



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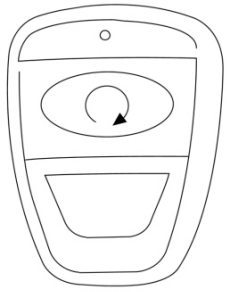
INSTALLATION (Continued)

Standard Key Fob (15K601) "Sold Separately"



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Bi-directional Key Fob (15K601) "Sold Separately"

N0162473

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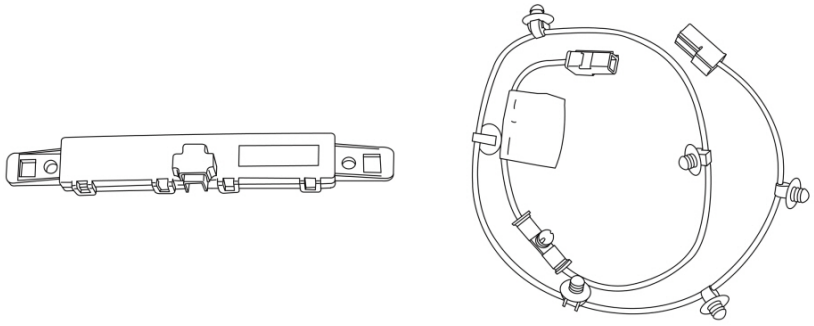
INSTALLATION (Continued)

Hood Switch Kit Components "Sold Separately"

N0122208

TPM Antenna Kit Components "Sold Separately"



N0144590

Optional RMST Upgrade Components "Sold Separately"

30. Review the RMST Upgrade components.

Remote Start (RMST) Upgrade - Antenna Kit "Sold Separately"

QUANTITY	DESCRIPTION
1	Bi-directional Antenna (TBD)
1	Security Jumper (TBD)

Standard Key Fob (15K601) "Sold Separately"

QUANTITY	DESCRIPTION
1	Standard Key Fob (15K601)

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INSTALLATION (Continued)

Bi-directional Key Fob (15K601) "Sold Separately"

QUANTITY	DESCRIPTION
1	Bi-directional Key Fob (15K601)

Review Hood Switch Kit Contents "Sold Separately"

31. Review the Hood Switch kit contents.

Hood Switch Kit

QUANTITY	DESCRIPTION
1	Hood Switch Assembly

TPM Antenna Kit Components "Sold Separately"

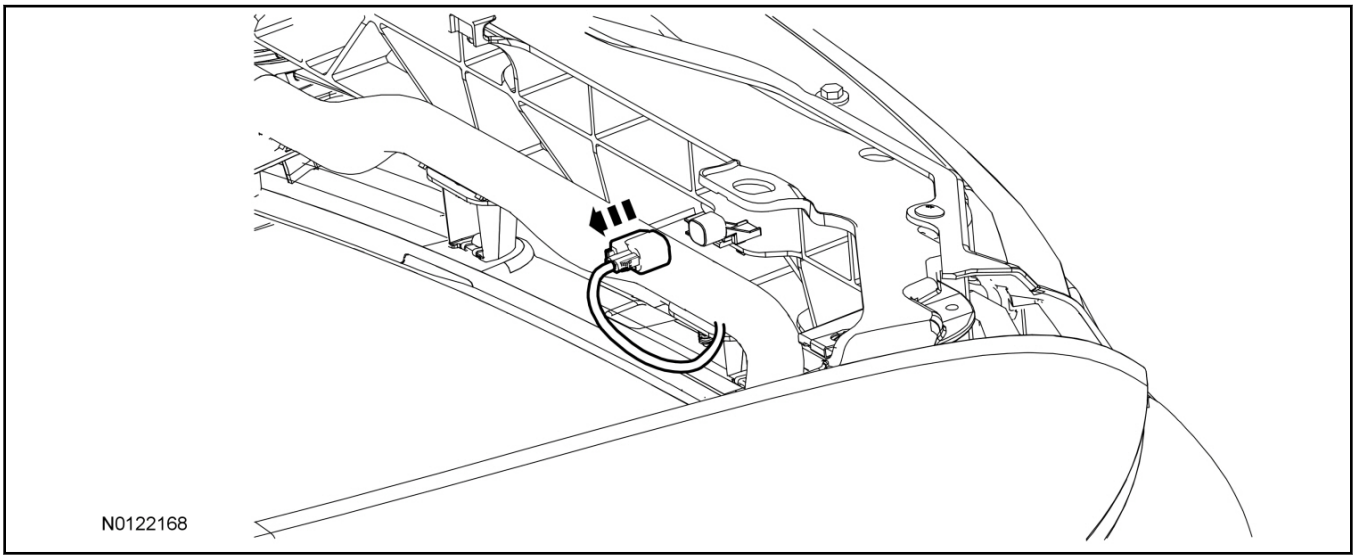
32. Review the TPM antenna kit contents.

TPM Antenna Kit

QUANTITY	DESCRIPTION
1	Antenna Module
1	Antenna Jumper Wire
1	2-sided Tape (not shown)

Hood Switch Installation

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



34. Install the OE hood switch assembly to the existing hood switch mounting location, on the upper radiator core support as shown.
    - Position the flat spot on the hood switch with the flat spot on the radiator core support.

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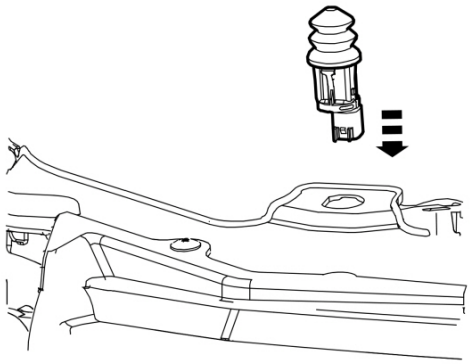
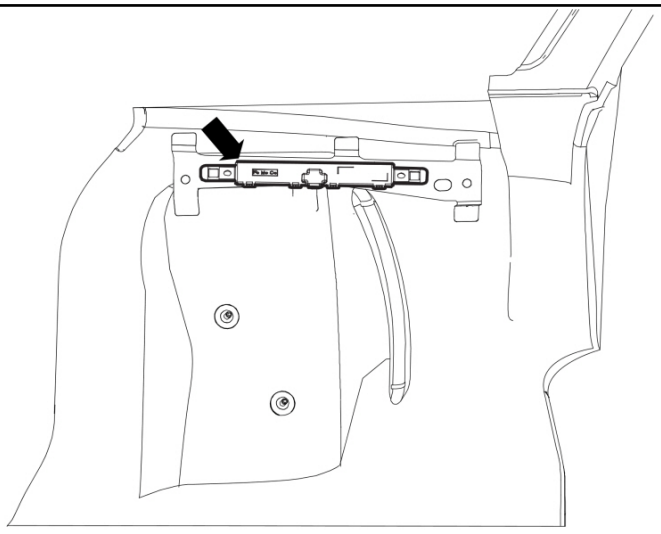

N0122172

35. Connect the electrical connector to the hood switch.

TPM Antenna Kit Installation

NOTE:
The TPM Antenna Kit is only required if the vehicle is not equipped with Factory remote start.

36. Remove the rear LH quarter trim panel. For additional information, refer to Workshop Manual (WSM) Section 501-05.
37. Position the antenna module into the vehicle and secure with tie straps.


N0122203

38. **NOTE:**
    LH quarter trim panel removed for clarity.

    Install the antenna jumper wire to the vehicle.

    - Connect to the antenna module and to the TPM module.
    - Secure with tie straps.

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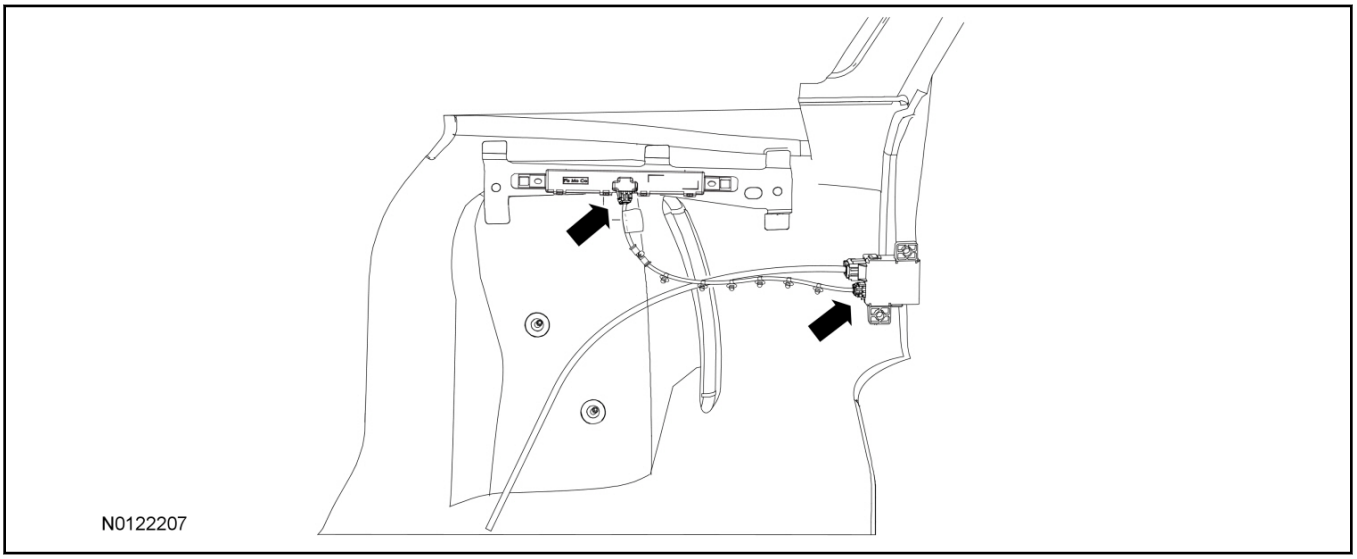
INSTALLATION (Continued)

- The push pins on the antenna jumper wire are not used for this application.



39. Install the rear LH quarter trim panel. For additional information, refer to WSM Section 501-05.

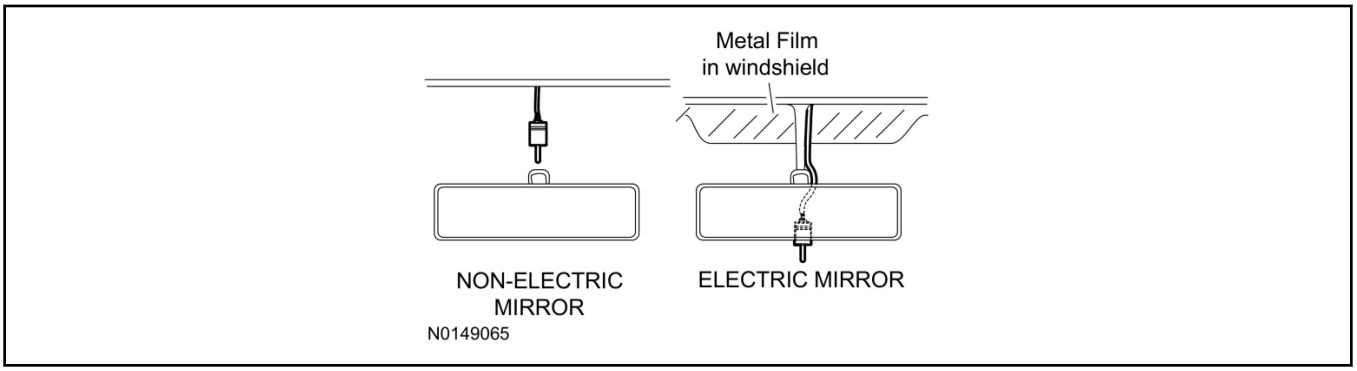
RMST Kit Antenna Installation

40. Remove the LH IP side trim panel.
41. Clean the antenna mounting surface using an alcohol base solution and a clean cloth.
42. **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 onto the mounting surface.



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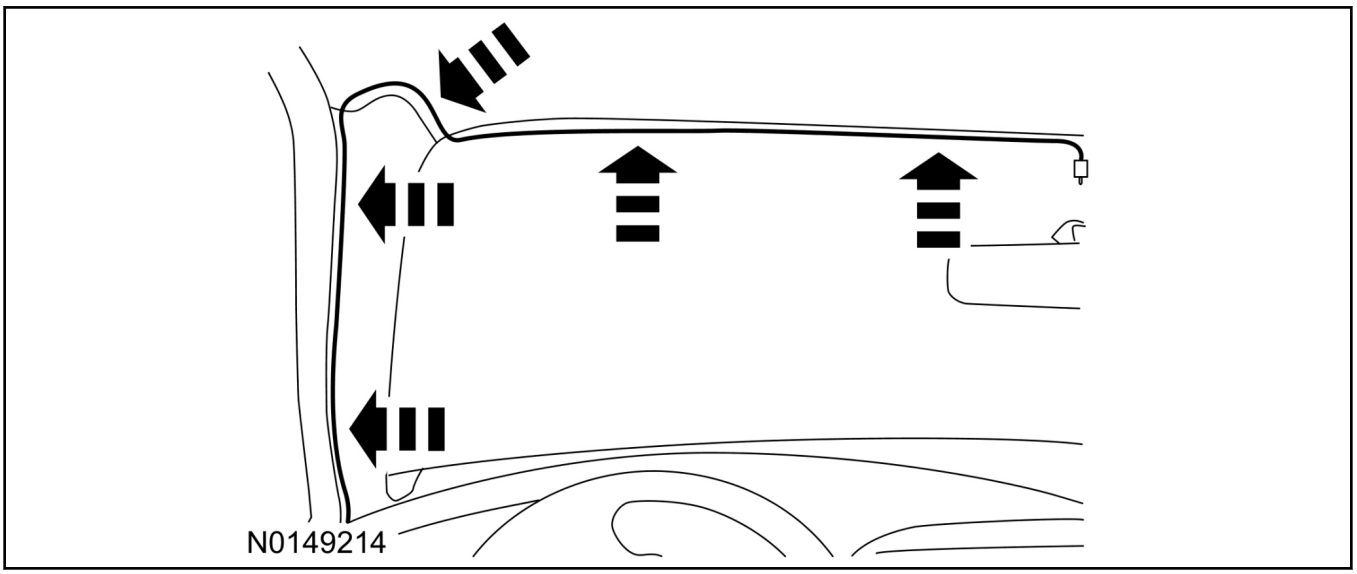
INSTALLATION (Continued)

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

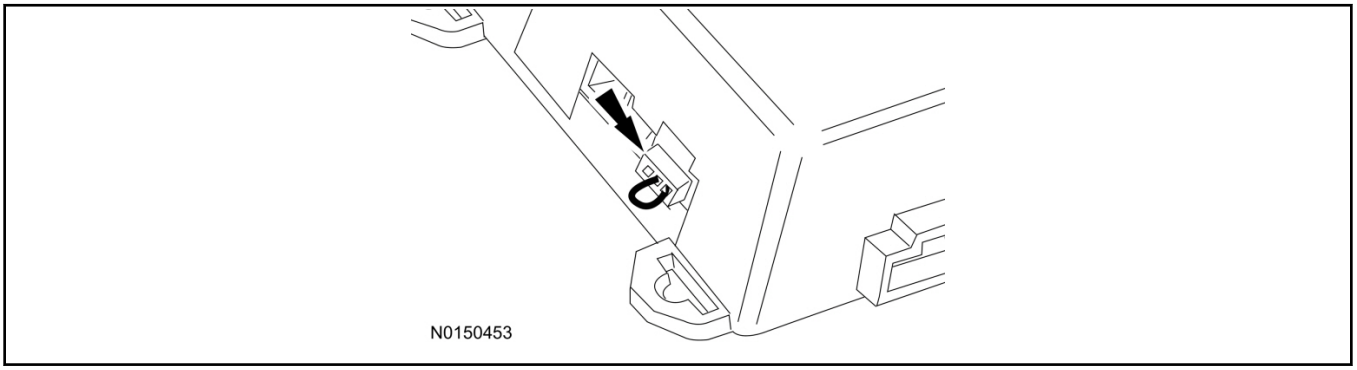
43. Route the antenna cable along the headliner and down the LH A-pillar towards the floor. Continue routing the wire into the IP towards the VSS module.
    - Secure with tie-straps.



44. Connect the antenna connector to the VSS module.
45. Install the LH IP side trim panel.

VSS Module - Optional Vehicle Security Features

46. Enable/Disable Vehicle Security Features:
    Locate the security jumper supplied in the kit.
    - Install the jumper to the VSS module if the vehicle security features are to be **disabled**.
    - Not installing and/or removing the jumper from the VSS module will keep the vehicle security features **enabled**.



RMST Activation - Key Start Only

NOTE:
For vehicles equipped with push button start, proceed to Step 59 within the "Programming Key Fobs" section of this manual.

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INSTALLATION (Continued)

47. Verify that the IDS is updated to the most current version.
48. Connect IDS.
    - Follow the prompts to select new vehicle session.
    - Enter VIN.
49. Activate the remote start using the IDS.
    - Select the Tool Box icon.
    - Select Body.
    - Select Security.
    - Select Remote Start.
    - Verify that the information on the IDS screen is correct and all procedures have been followed.
    - Select Yes. This will enable the remote start function on the vehicle.
50. For vehicles equipped with standard message center, verify that the remote start option now appears.
    - Using the Select and Arrow buttons on the steering wheel, select Settings.
    - Select Convenience.
    - Select Remote Start.
    - Select System.
    - Verify that the remote start system is checked.
51. For vehicles equipped with advanced message center, verify that the remote start option now appears.
    - Using the Select and Arrow buttons on the steering wheel, select Settings.
    - Select Vehicle Settings.
    - Select Vehicle.
    - Select Remote Start System.
    - Verify that the remote start system is enabled.

Learn Remote Start to Vehicle (Push Button Start Vehicles Only)

52. Cycle door locks at trim switch four times to learn remote start keyless functions.

Learn Remote Start to Vehicle (Key Start Vehicles Only)

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

53. Press the vehicle's unlock button located on the driver's door. Make sure all doors are unlocked.
54. Put the key in the ignition.

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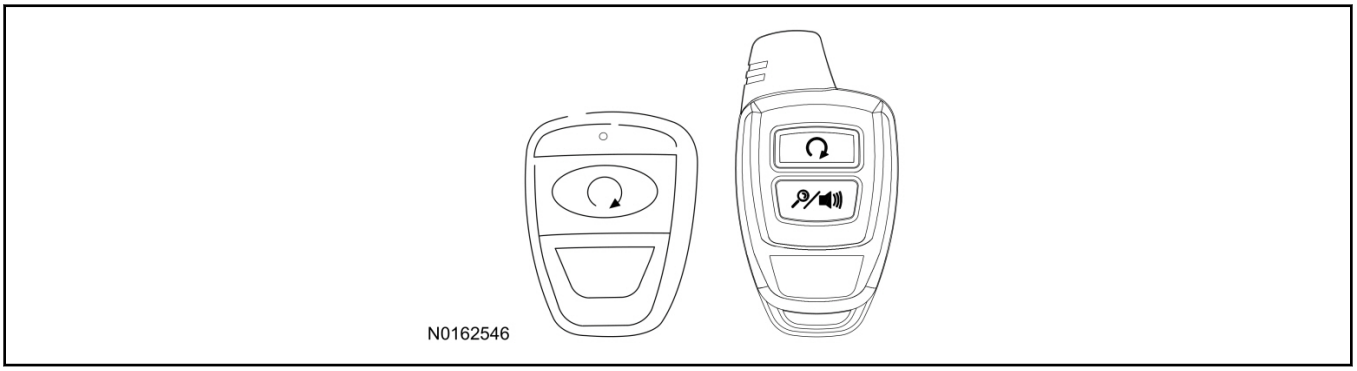
INSTALLATION (Continued)

55. Cycle eight times rapidly (within 10 seconds) between the 1 (OFF/LOCK) position and 3 (ON) position.
    - The eighth turn must end in the 3 (ON) position. The doors will lock, then unlock, to confirm that the programming mode has been activated.
56. Wait for 10 seconds and the remote start module will program itself to the system.
    - After 20 seconds, you will automatically exit the programming mode. The doors will lock, then unlock, to confirm that the programming mode has been exited.
57. If equipped with additional accessories (i.e. RF keypad), verify that they maintain all functionality post installation.

Programming Key Fobs



58. **Key Start Vehicles:**

    NOTE:
    These steps must be performed with the VSS module security jumper removed if previously installed. For additional information refer to "VSS Module - Optional Vehicle Security Features".

    1 Start with doors unlocked

    2 Driver's door open (remaining open throughout)

    3 Verify that the gearshift lever is in the "PARK" position.

    4 Depress and hold brake pedal.

    5 Start with ignition key OFF.

    6 Cycle ignition key to the ON then OFF position 5 times, then back to the ON position a 6th time.

    ▪ The horn will honk 3 times to indicate transmitter learn mode access.

    7 Press the START button on each transmitter you wish to program. The horn will honk 1 time each time the START button is pressed to indicated the transmitter has been learned.

    8 Cycle ignition key to the OFF position to exit transmitter learn mode.

    9 **NOTE:**
    If the security jumper is installed the vehicle security features are disabled.

    If previously removed, reinstall the VSS module security jumper. For additional information, refer to "VSS Module - Optional Vehicle Security Features".

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INSTALLATION (Continued)

59. **Push Button Start Vehicles:**

    NOTE:
    These steps must be performed with the VSS module security jumper removed if previously installed. For additional information refer to "VSS Module - Optional Vehicle Security Features".

    NOTE:
    The following steps must be performed with the driver door open.

    1 Enter the vehicle with the vehicle key(s) and key fobs you wish to program.

    2 Depress and hold brake pedal.

    3 Press the start/stop button.

    4 After the vehicle starts press the start/stop button to shut down.

    5 Repeat steps 3 and 4 an additional four times, ending in ignition on, engine off.

    6 Release the brake pedal.

    7 Press the vehicle start/stop button twice to turn ignition on.

    - The horn will honk 3 times to indicate transmitter learn mode access.

    8 Press the start stop button on each fob you wish to program.

    9 Cycle ignition to the OFF position to exit transmitter learn mode.

    10 **NOTE:**
    If the security jumper is installed the vehicle security features are disabled.

    If previously removed, reinstall the VSS module security jumper. For additional information, refer to "VSS Module - Optional Vehicle Security Features".

RMST Functional Test

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

60. Make sure the shift lever is in PARK and the ignition is in the OFF position. Remove all keys from the vehicle.
61. Close the hood.
62. Close all of the vehicle doors.
63. Start the vehicle by pressing the remote start button twice on the remote start key fob.
64. Confirm the remote start works with the vehicle in park and with the hood and doors closed.
65. Open the hood.
66. **NOTE:**
    Vehicle doors should be closed while performing this step.

    Confirm that the vehicle will not start with the hood open.
    Please contact 1-800-FORD-KEY with any issues regarding hardware or kit contents.
67. See the Scalable Remote Start System Diagnosis Guide to resolve issues identified by the functional test.

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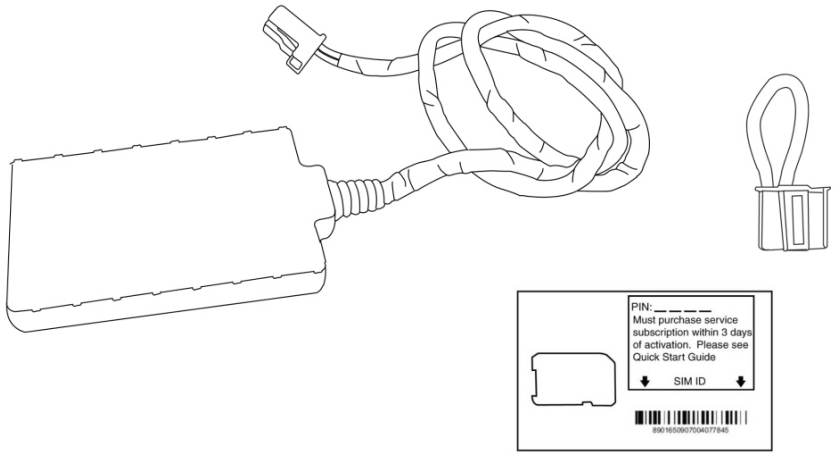
INSTALLATION (Continued)

III. Remote Access (RMU) Upgrade "Sold Separately"



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68. Review the RMU upgrade components.

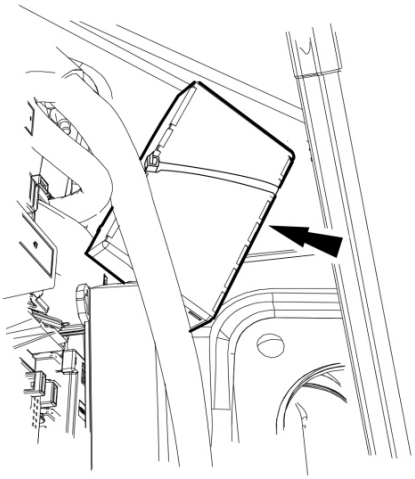
Optional Components — Remote Access (RMU) Upgrade "Sold Separately"

QUANTITY	DESCRIPTION
1	Remote Messaging Unit (RMU)
1	SIM Card Carrier
1	Security Jumper

⚠ **CAUTION:**
Carefully route and secure module and harnesses so that they do not interfere with moving parts or linkages.

NOTE:
For proper range of operation, the RMU must be installed as shown in the diagram below.

69. Using tie-straps secure the RMU to the harness above the previously installed VSS module.



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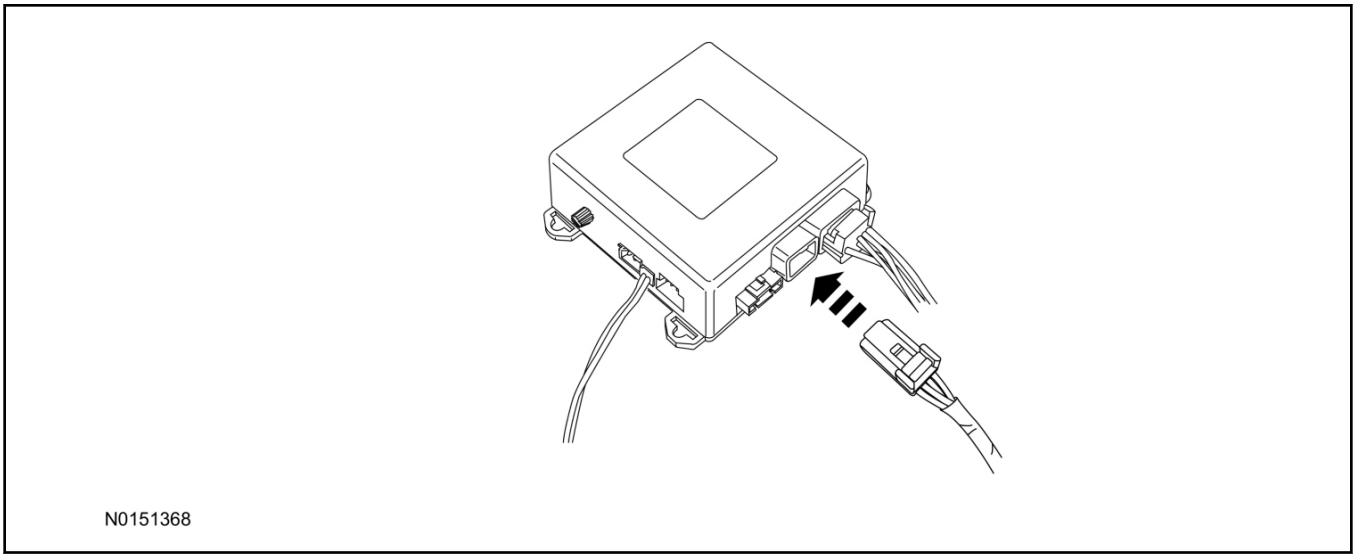
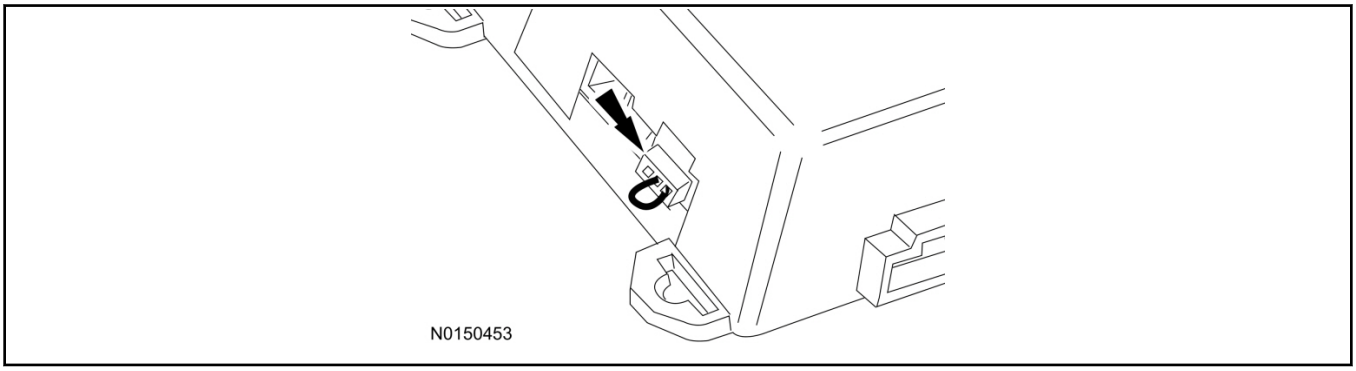
INSTALLATION (Continued)

70. Connect the RMU electrical connector to the VSS module.
    - Secure the harness with tie-straps.



VSS Module - Optional Vehicle Security Features

71. Enable/Disable Vehicle Security Features:
    Locate the security jumper supplied in the kit.
    - Install the jumper to the VSS module if the vehicle security features are to be **disabled**.
    - Not installing and/or removing the jumper from the VSS module will keep the vehicle security features **enabled**.



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INSTALLATION (Continued)

Remote Start Activation - Key Start Vehicles (Without Factory Remote Start)

72. Verify that the IDS is updated to the most current version.
73. Connect IDS.
    - Follow the prompts to select new vehicle session.
    - Enter VIN.
74. Activate the remote start using the IDS.
    - Select the Tool Box icon.
    - Select Body.
    - Select Security.
    - Select Remote Start.
    - Verify that the information on the IDS screen is correct and all procedures have been followed.
    - Select Yes. This will enable the remote start function on the vehicle.
75. For vehicles equipped with standard message center, verify that the remote start option now appears.
    - Using the Select and Arrow buttons on the steering wheel, select Settings.
    - Select Convenience.
    - Select Remote Start.
    - Select System.
    - Verify that the remote start system is checked.
76. For vehicles equipped with advanced message center, verify that the remote start option now appears.
    - Using the Select and Arrow buttons on the steering wheel, select Settings.
    - Select Vehicle Settings.
    - Select Vehicle.
    - Select Remote Start System.
    - Verify that the remote start system is enabled.

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INSTALLATION (Continued)

Learn Remote Start to Vehicle (Push Button Start Vehicles Only)

77. Cycle door locks at trim switch four times to learn remote start keyless functions.

Learn Remote Start to Vehicle (Key Start Vehicles Only)

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

78. Press the vehicle's unlock button located on the driver's door. Make sure all doors are unlocked.
79. Put the key in the ignition.
80. Cycle eight times rapidly (within 10 seconds) between the 1 (OFF/LOCK) position and 3 (ON) position.
    - The eighth turn must end in the 3 (ON) position. The doors will lock, then unlock, to confirm that the programming mode has been activated.
81. Wait for 10 seconds and the remote start module will program itself to the system.
    - After 20 seconds, you will automatically exit the programming mode. The doors will lock, then unlock, to confirm that the programming mode has been exited.
82. If equipped with additional accessories (i.e. RF keypad), verify that they maintain all functionality post installation.

RMU Activation

NOTE:
Please note that the Remote Access application that is used to start the vehicle for this RMST kit will only work with iPhone and Android phones.

83. For RMU activation the following information from the customer is recommended to provide them with electronic notification for app retrieval:
    1 Email Address
    2 Cell Phone Number
    3 Cell Phone Carrier Company
84. Log on to your Professional Technician Society (PTS) account and enter the vehicle information.
    1 Select "Vehicle Id".
    2 Select "By Year & Model"
    3 Choose the year & model of the vehicle and then select "GO".
    4 Hover over the "Workshop" tab.
    5 Select the "Accessory Installation" menu item.
    6 Under the "Electrical" heading, select the "Remote Access Activation" link (first time users will need to agree to terms & conditions).
    7 Select the "Install or Diagnose" link.

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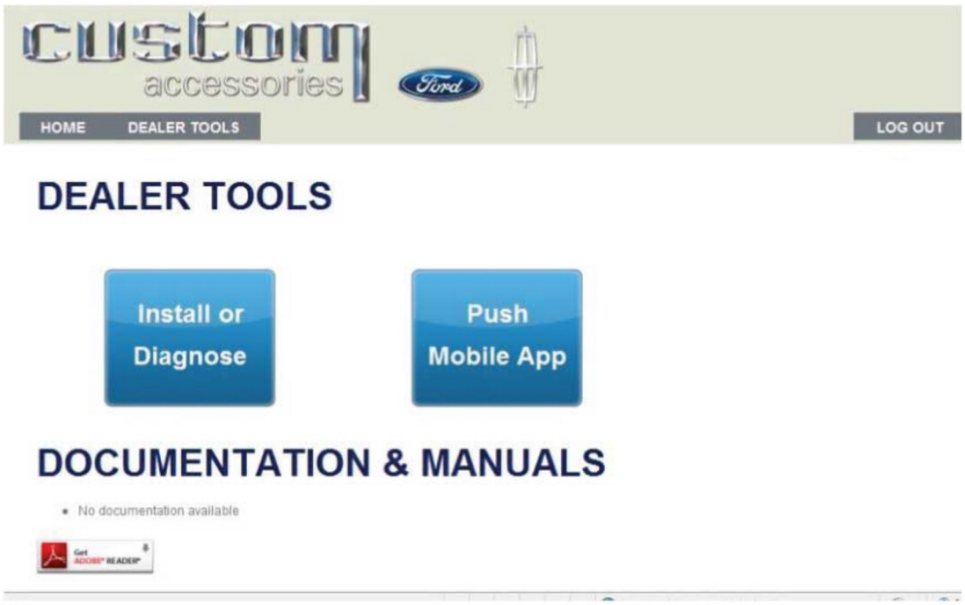
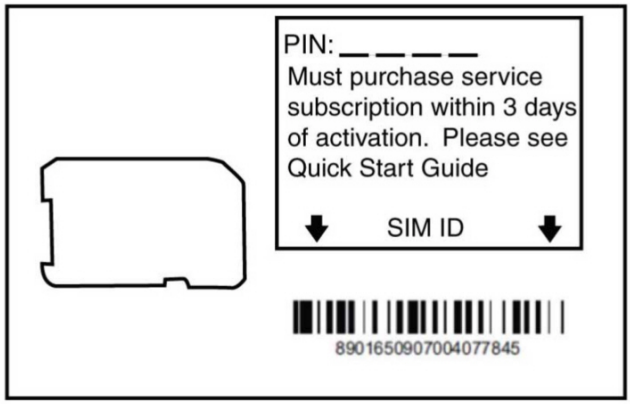
INSTALLATION (Continued)

NOTE:
If you are not directed to the screen shown below (or user agreement screen for first time users), make sure your internet browser zone settings are set to medium. This setting can be found in your browsers "internet options" under the "privacy" tab.



N0150870

85. Once on the "Install" page, enter the SIM ID code that was provided with the RMST kit. Select "Begin or Continue Installation".



SIM CARD CARRIER

N0150580

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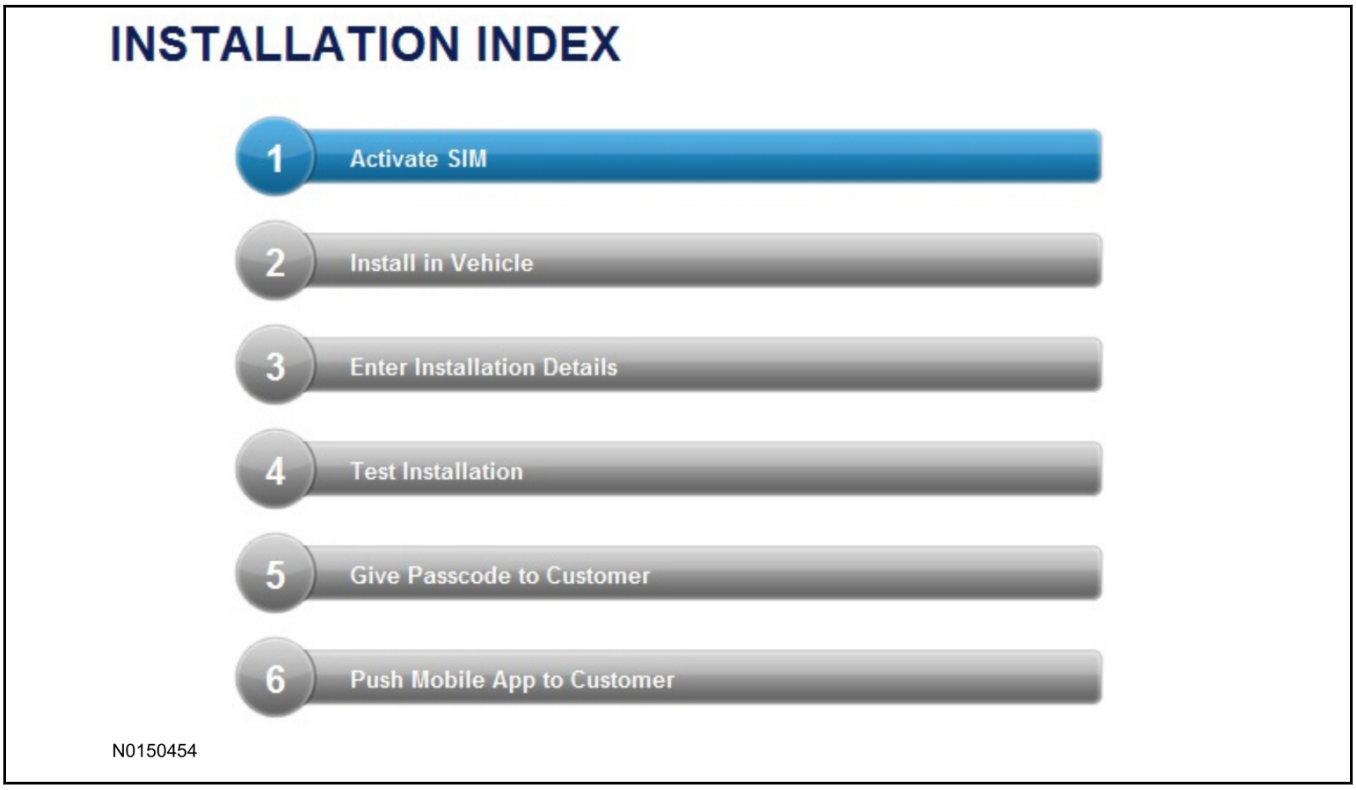
INSTALLATION (Continued)

86. Click on the "On screen steps 1-6", and follow the on screen instructions to complete the installation.



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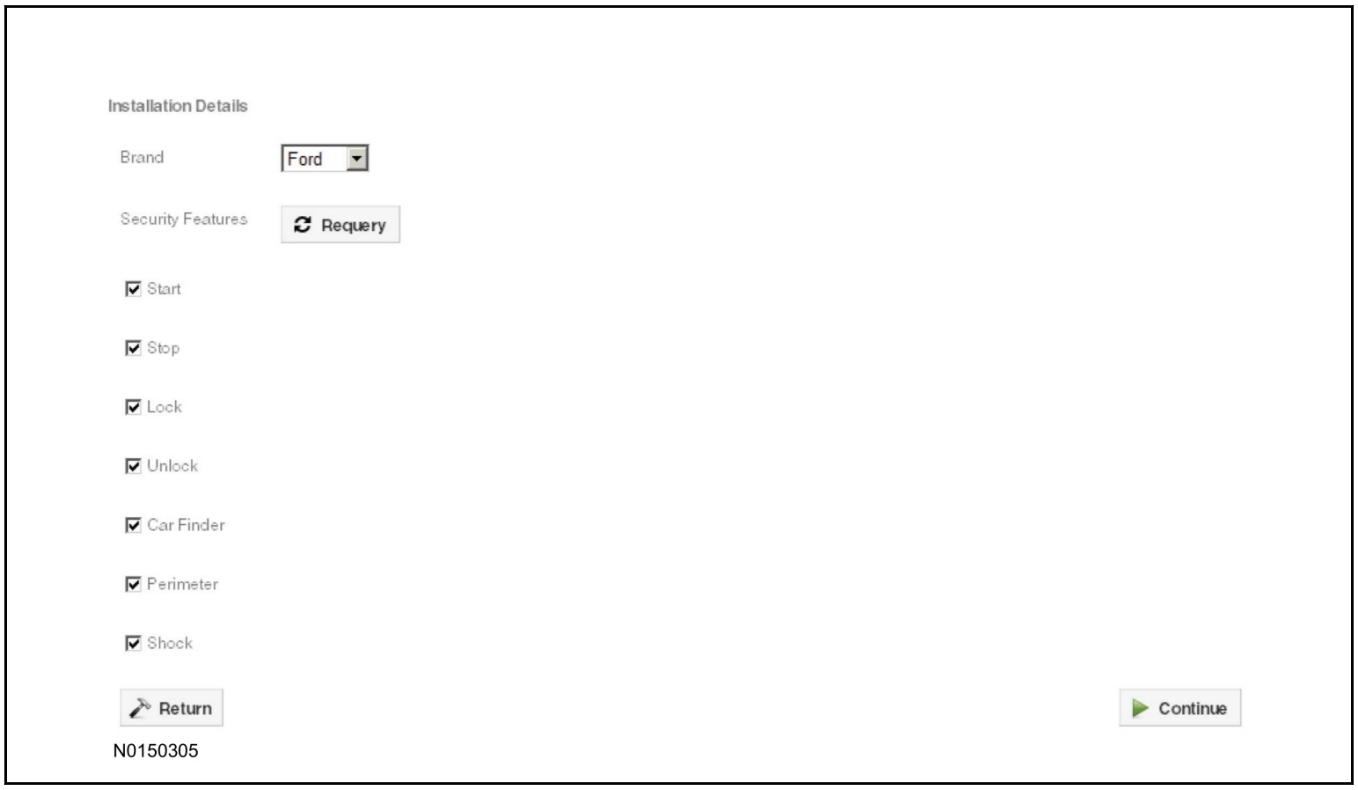
INSTALLATION (Continued)

NOTE:
The following step will complete the activation process, when you are directed to a screen similar to the one below ensure the correct vehicle brand is selected and that all applicable features are enabled.

NOTE:
The "perimeter" and "shock" settings below are optional features and should only be selected when security features are enabled.



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INSTALLATION (Continued)

87. Perform a functional check of the system by testing each of the available features.
    - Start/Stop function
    - Lock/Unlock function
    - Car finder
    - Signal (for troubleshooting only)

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INSTALLATION (Continued)

NOTE:
All tests above must be completed in order to move to the next step. If any of the listed functions fail, move the vehicle to an outside location and retest.

Key Start Vehicles Only

NOTE:
In the event start or stop fail, refer to the "Remote Start Activation" section in this manual.

NOTE:
In the event lock/unlock or car find fail, refer to the "Learn Remote Start System to Vehicle" section in this manual.

All Vehicles

88. Once the hardware installation and RMU activation process is complete, record the 4-digit PIN on the SIM card carrier. Provide the SIM card carrier to the customer so they can add this system to their Remote Access Account. Customer must have both the 4-digit PIN and SIM ID to activate/add their vehicle to their Remote Access Account.
89. If the customer agrees, you may push the mobile application to the customer. You will need the customer's phone number and cellular carrier. If the customer opts to install the application themselves, they can locate it in their mobile app store.
    Please contact 1-800-FORD-KEY with any issues regarding hardware or kit contents.

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