Vehicle Security / Remote Start / Remote Access System Installation

CONTENTS

INSTALLATION

Vehicle Security / Remote Start / Remote Access - Edge

VSS System Components


N0162474
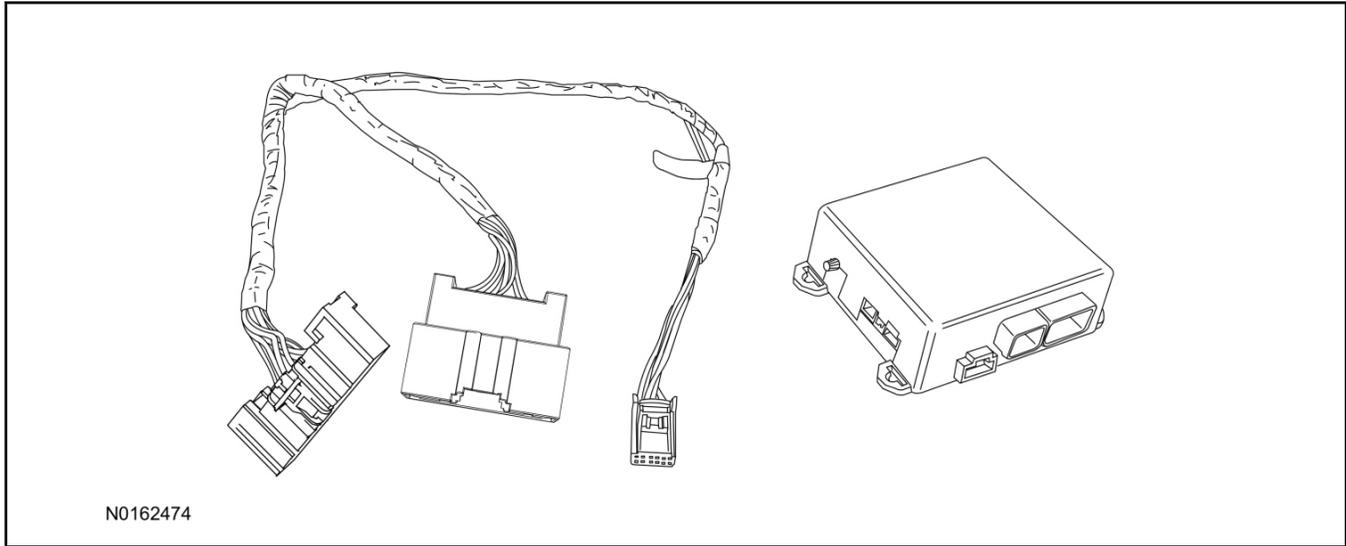
Security Indicator LED (19D596) "Optional"

N0150452
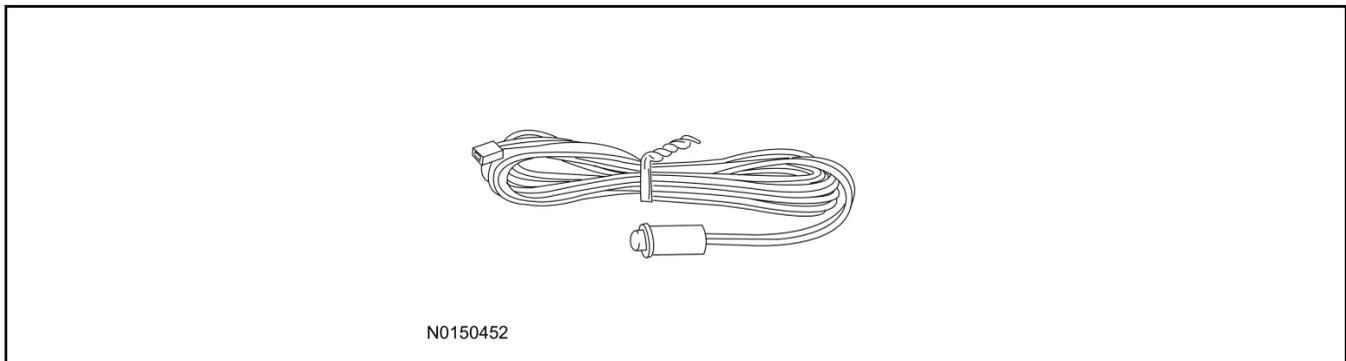
Edge

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

INSTALLATION (Continued)

Vehicle Security System (VSS) Kit(Continued)

6	Tie-straps (not shown)
1	Owner's Manual (not shown)

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. If the vehicle is equipped with factory remote start, test its operation by pressing the Lock button one time and the Remote Start button two times.

    • If the vehicle remote starts, stop the engine by pressing the Remote Start button one time.

    • If the vehicle does not remote start, diagnose the concern.

5. Disconnect the vehicle battery negative terminal. For additional information, refer to Workshop Manual (WSM) Section 414-01.

6. Disconnect the electrical connector from the back of the gateway module.

INSTALLATION (Continued)

6. Disconnect the electrical connector from the back of the gateway module.
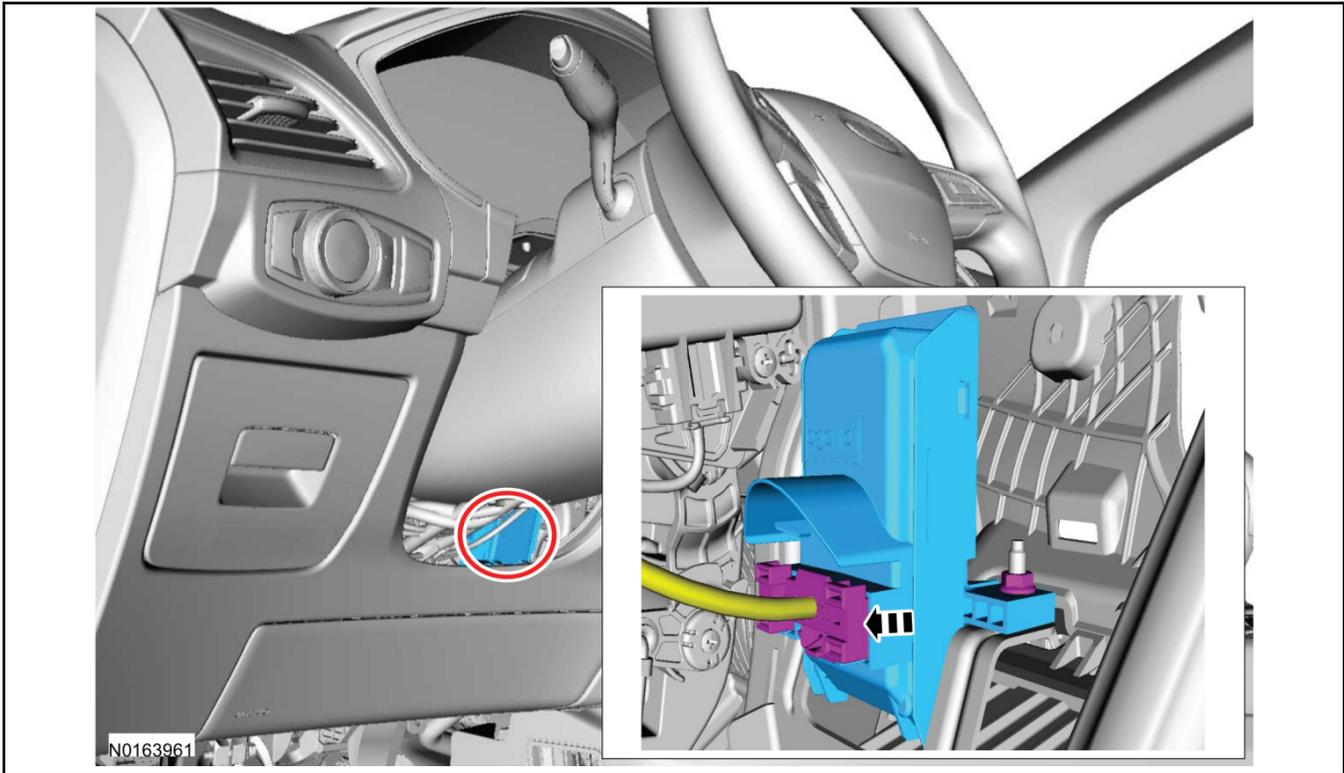
7. Connect the T-harness to the gateway module electrical connector.
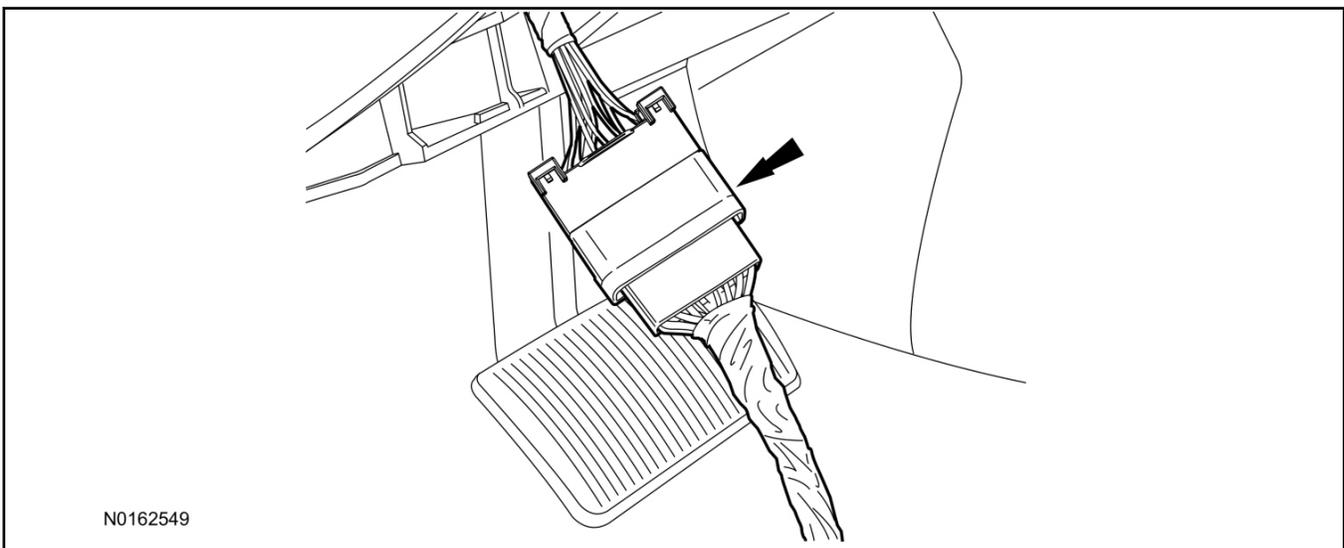
8. Connect T-harness to the back of the gateway module.

N0163965
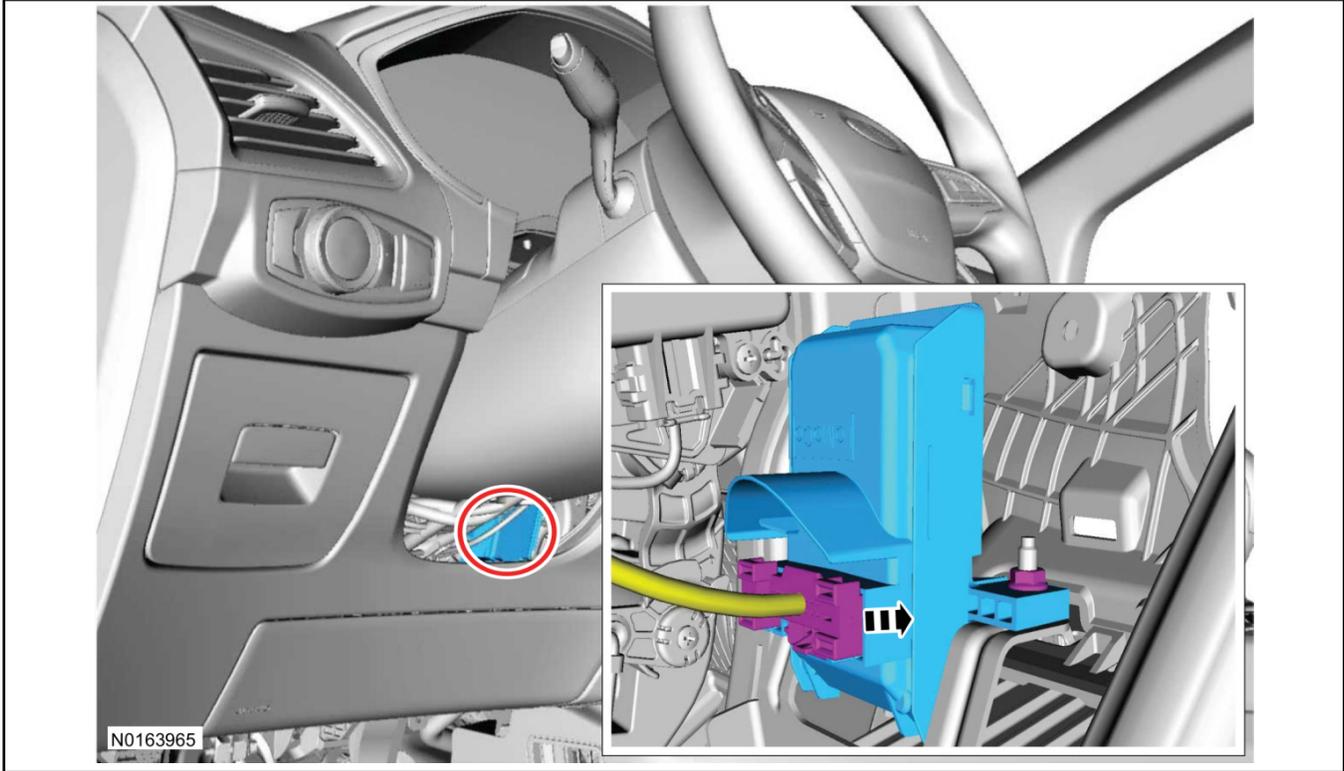
9. ⚠ **CAUTION:**

    When securing the T-harness, make sure it is not contacting any moving parts such as the accelerator pedal, brake pedal, or steering wheel intermediate shaft.

    Position the T-harness inside the IP being careful to avoid sharp edges and moving parts.

    • Secure with zip-ties.

10. Using tie-straps, secure the VSS module to the IP frame located to the left of the steering wheel intermediate shaft.

    • 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.

INSTALLATION (Continued)

N0163966
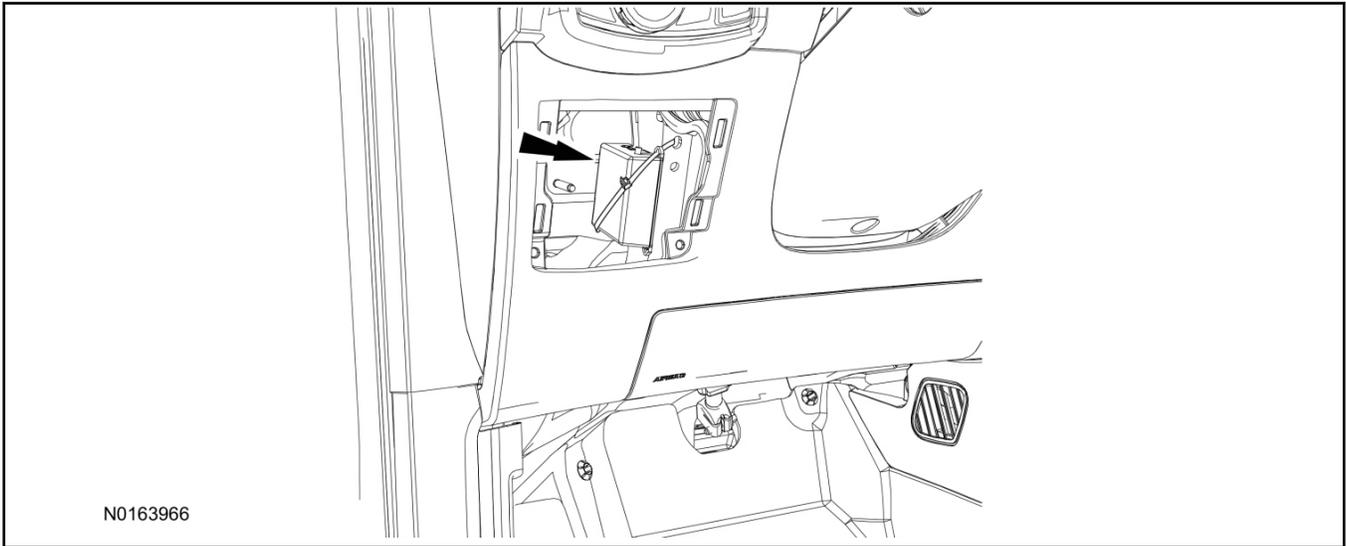
11. ⚠ **CAUTION:**

When routing the T-harness to the VSS module, make sure it is not contacting any moving parts such as the accelerator pedal, brake pedal, or steering wheel intermediate shaft.

Connect the T-harness to the VSS module.

• Secure the VSS harness with tie-straps.

N0149066
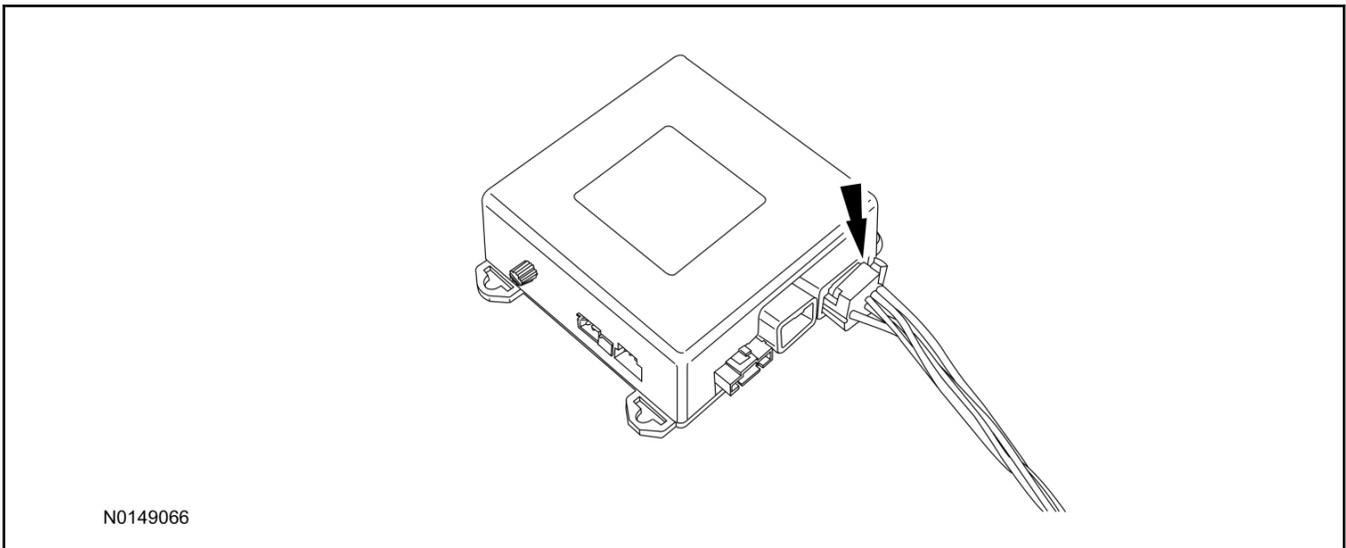
12. Connect the vehicle battery negative terminal. For additional information, refer to WSM Section 414-01.

INSTALLATION (Continued)

Optional Security Indicator LED Mounting

⚠ CAUTION:
**Carefully route and secure LED harness so that it does not interfere with moving parts or linkages.**

13. 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.

14. 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.

15. Route the LED wire harness to the VSS module.

16. Connect the LED wire harness to the VSS module 2-pin white connector.

    • Secure the LED wire harness with tie-straps.

N0151367
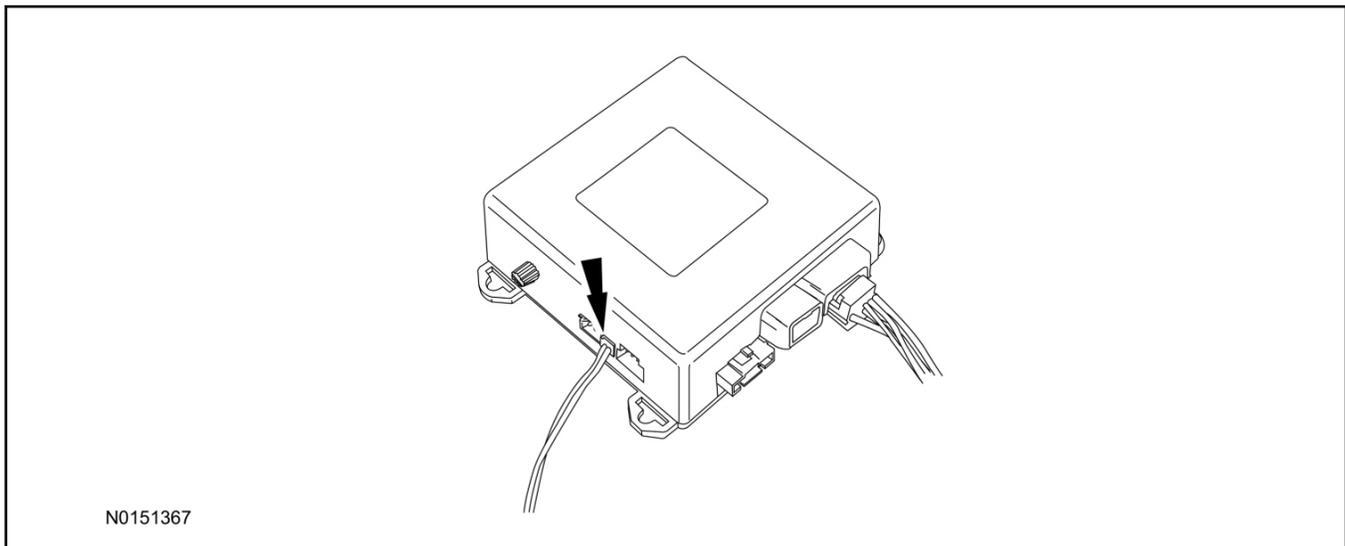
Perimeter Alarm Activation - Vehicles Without Factory Installed Perimeter Alarm

17. Verify that the IDS is updated to the most current version.

18. Connect IDS.

    • Follow the prompts to select new vehicle session.

    • Enter VIN.

INSTALLATION (Continued)

19. Activate the perimeter alarm using the IDS.

- Select the Tool Box icon.

- Select Module Programming.

- Select Programmable Parameters.

- Select Security.
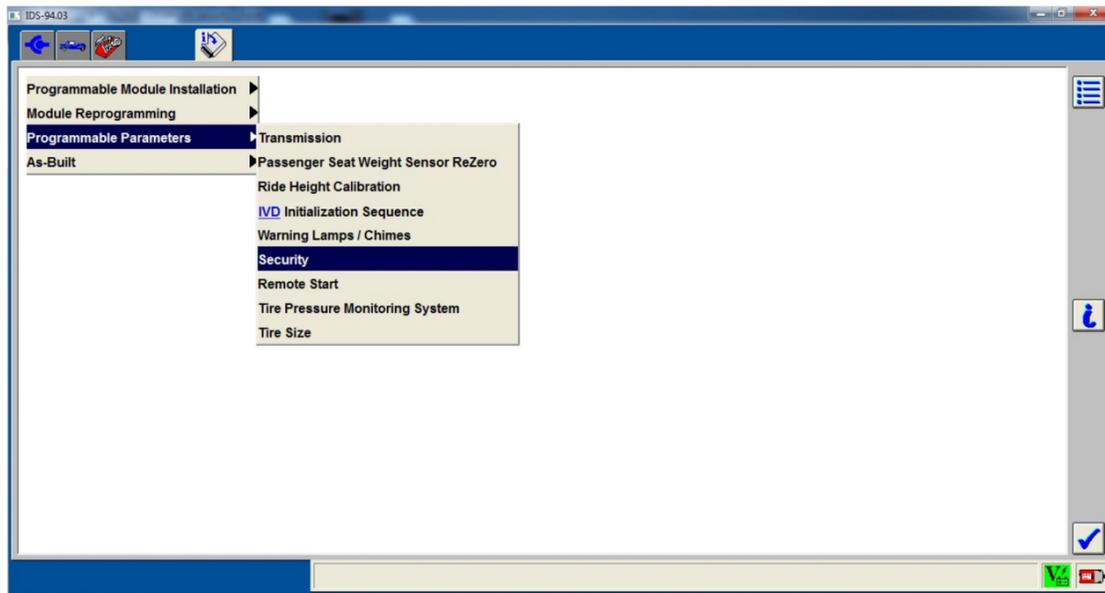
N0164680

INSTALLATION (Continued)

20. Verify that the instructions on the IDS screen have been completed and continue until you reach the screen below.

    • From this screen, select the "Enabled" text to the right of "Perimeter Alarm - (BdyCM)".

    • Once "Enabled" has been selected, select the Tick button to direct IDS to enable the perimeter alarm option on the vehicle.
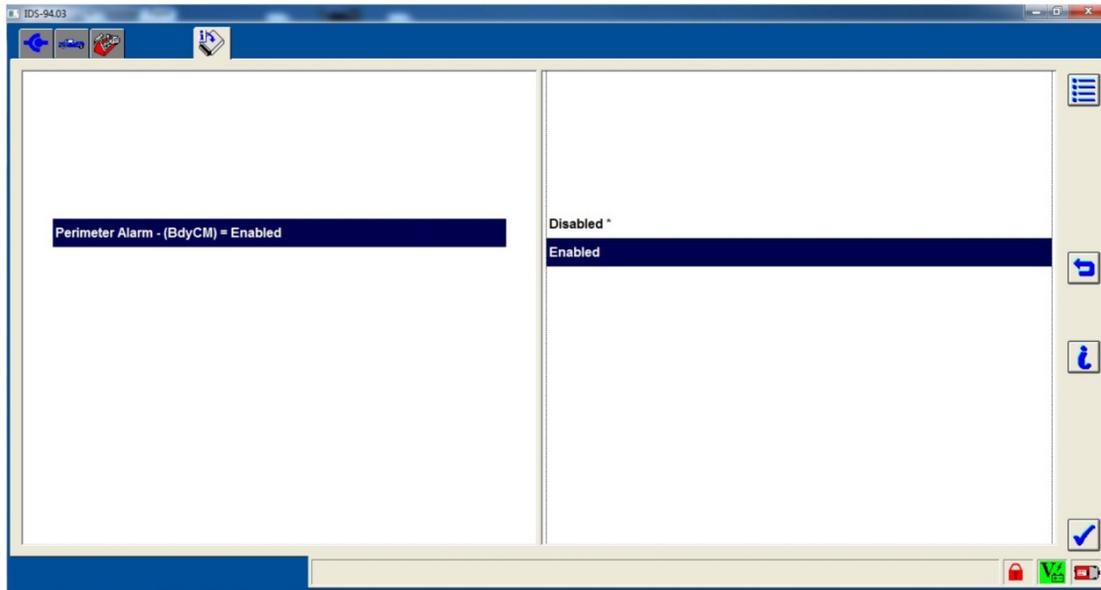
N0164681

INSTALLATION (Continued)

21. Activate the hood switch monitor using IDS (NEW for 2017MY).

    • Select the Tool Box icon.

    • Select Module Programming.

    • Select Programmable Parameters.

    • Select Remote Start.
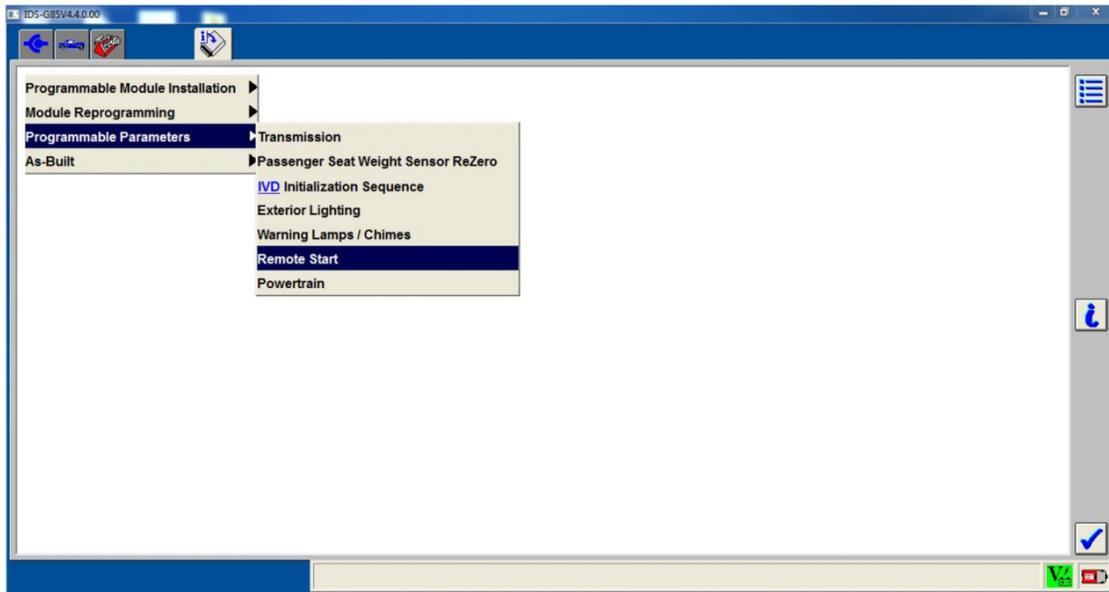
N0151675

22. Verify that the instructions on the IDS screen have been completed and continue until you reach the screen below.

    • From this screen, select the "Present" text to the right of "Hood Switch - (BdyCM)".

    • Once "Present" has been selected, select the Tick button to direct IDS to enable hood switch monitoring on the vehicle.

N0176708
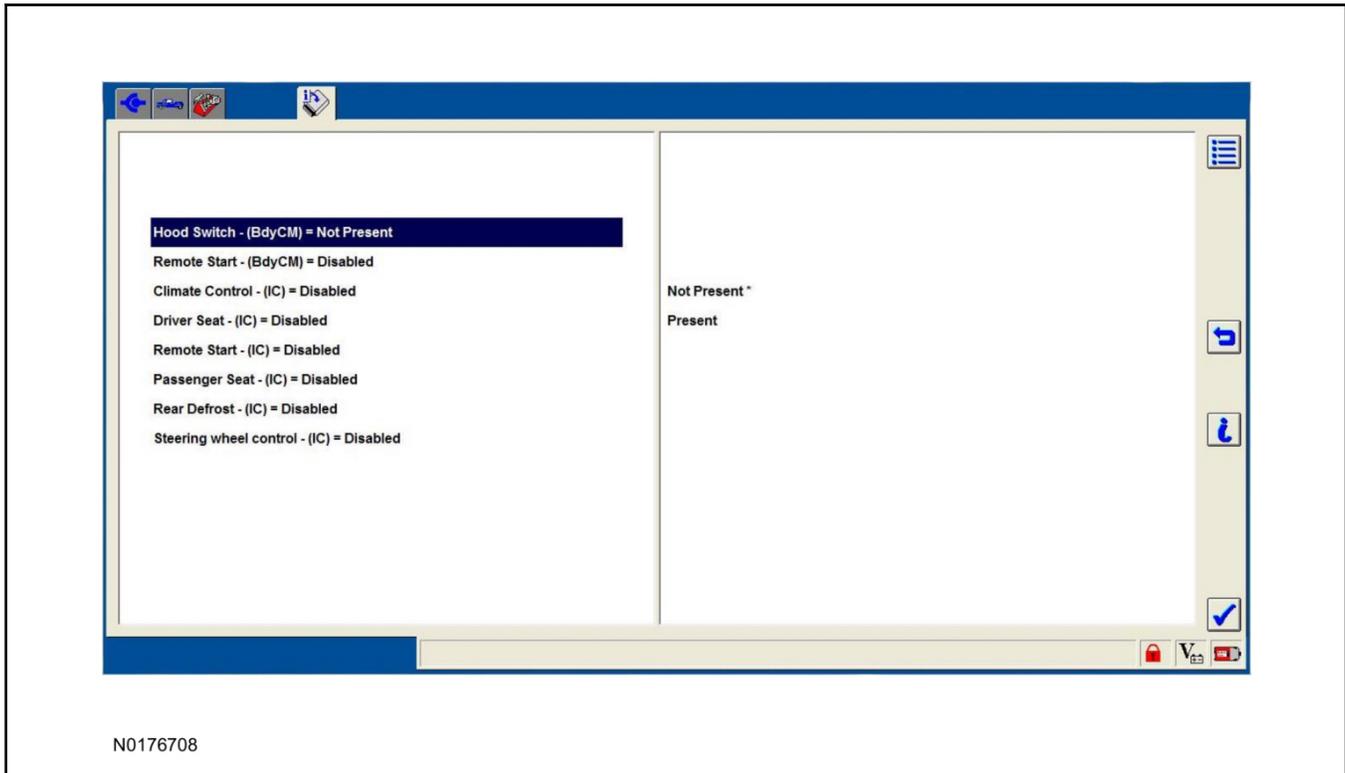
Learn VSS to Vehicle

23. Cycle ignition OFF, ON, OFF one time to learn VSS to the vehicle.

24. Use IDS to clear continuous DTCs.

25. If the vehicle is equipped with factory remote start, test its operation by pressing the Lock button one time and the Remote Start button two times.

    • If the vehicle remote starts, stop the engine by pressing the Remote Start button one time.

    • If the vehicle does not remote start, disconnect the vehicle battery negative terminal, wait five minutes and then reconnect the battery negative terminal. For additional information, refer to Workshop Manual (WSM) Section 414-01.

    • Retest the factory remote start.

    • If the vehicle does not remote start, diagnose the concern.

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.

N0146089
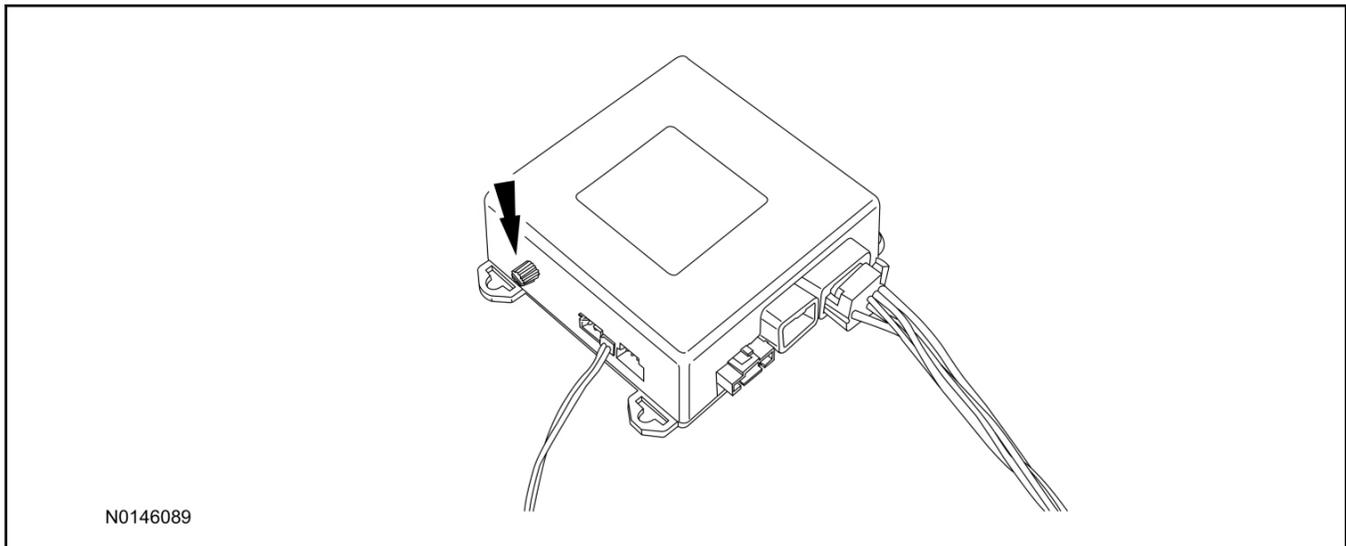
26. Starting with the adjustment knob in approximately the halfway position, lower the driver's window and exit the vehicle.

27. 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.

28. 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.

29. 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.

30. 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.

NOTE:

Cycle ignition OFF, ON, OFF before testing.

INSTALLATION (Continued)

31. 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.

32. 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.

33. 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.

34. Test all other vehicle doors, the hood and the trunk in the same manner, by setting off the alarm and disarming with the keyfob.

35. **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 antenna and harness so that they do not interfere with moving parts or linkages.

N0151451
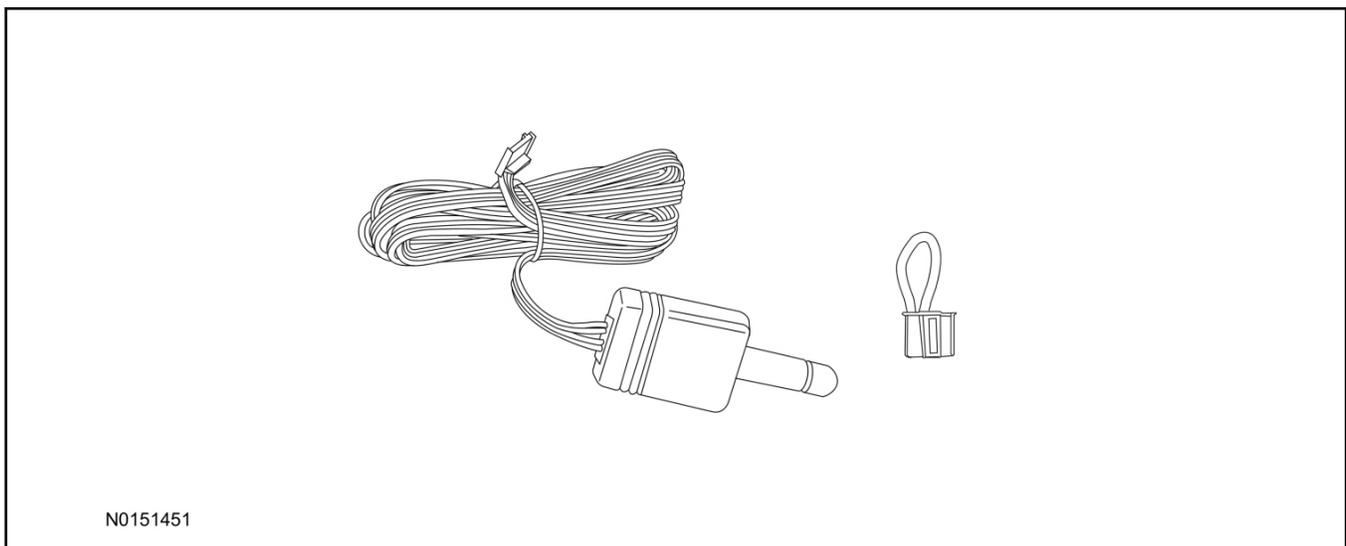
INSTALLATION (Continued)

Standard Key Fob (15K601) "Sold Separately"

N0151499

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

N0162473
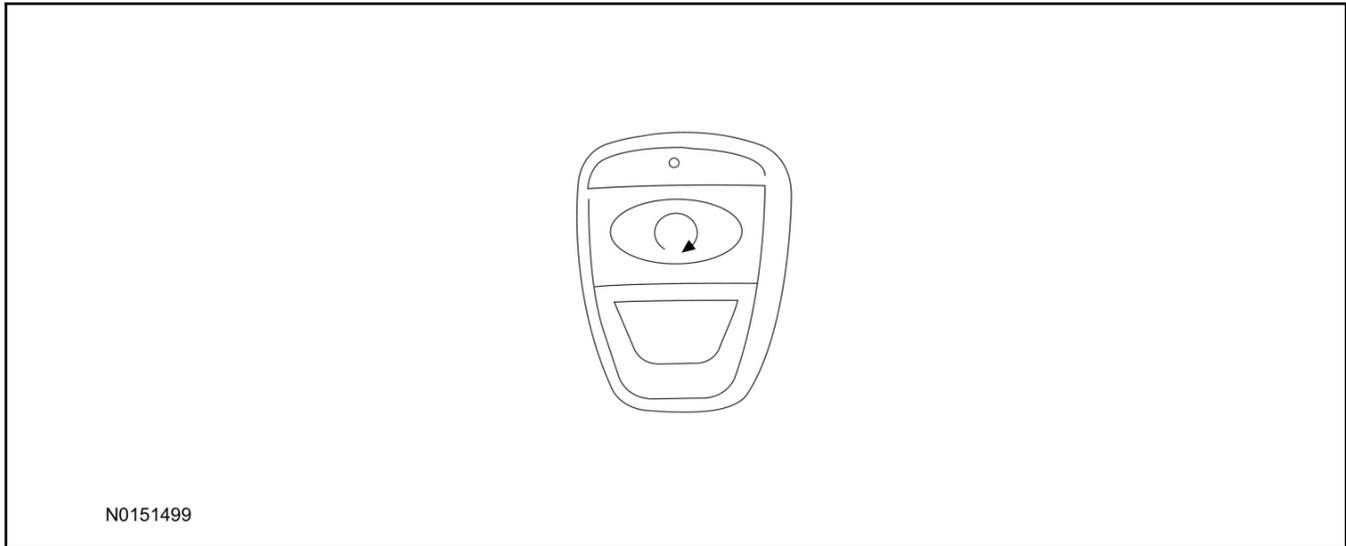
Optional RMST Upgrade Components "Sold Separately"

36. Review the RMST Upgrade components.

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

QUANTITY	DESCRIPTION
1	Bi-directional Antenna (15603)
1	Security Jumper (15603)

Standard Key Fob (15K601) "Sold Separately"

QUANTITY	DESCRIPTION
1	Standard Key Fob (15K601)

INSTALLATION (Continued)

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

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

RMST Kit Antenna Installation

37. Remove the LH IP side finish panel.

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

Metal Film in windshield

NON-ELECTRIC MIRROR

ELECTRIC MIRROR

N0149065
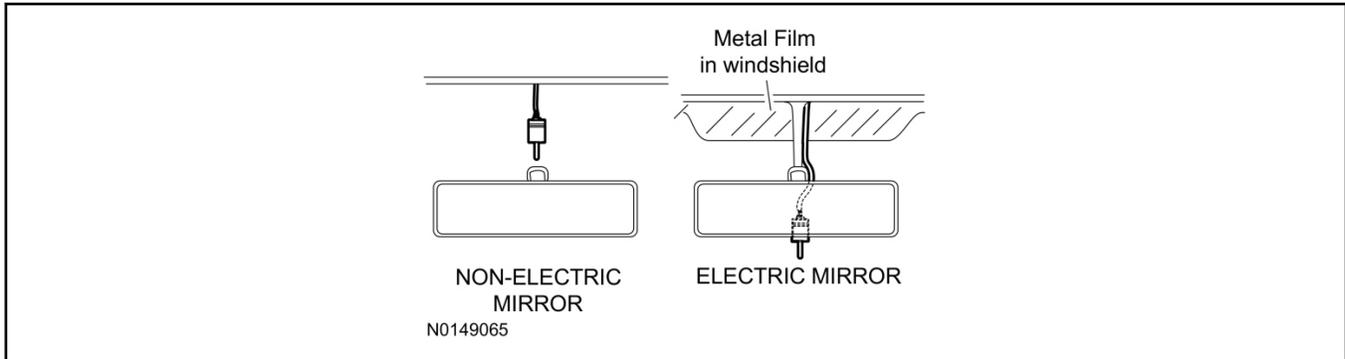
39. **NOTE:**
    Do not touch the adhesive, reduced adhesion may result.

    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.

40. 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 air bags.

41. Route the antenna cable along the headliner and down the A-pillar towards the floor. Continue routing the wire into the IP towards the VSS module.

    • Secure with tie-straps.

**INSTALLATION (Continued)**

N0149214
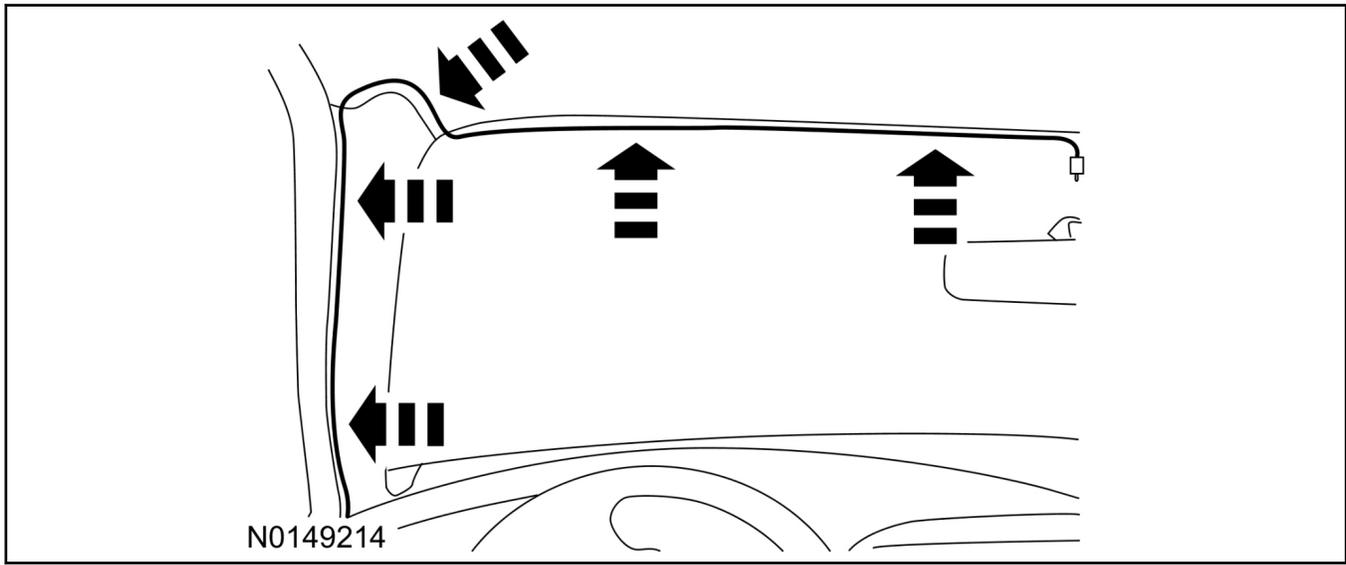
42. Connect the antenna connector to the VSS module.

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

44. Install the LH IP side finish panel.

VSS Module - Optional Vehicle Security Features

45. 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**.


N0150453
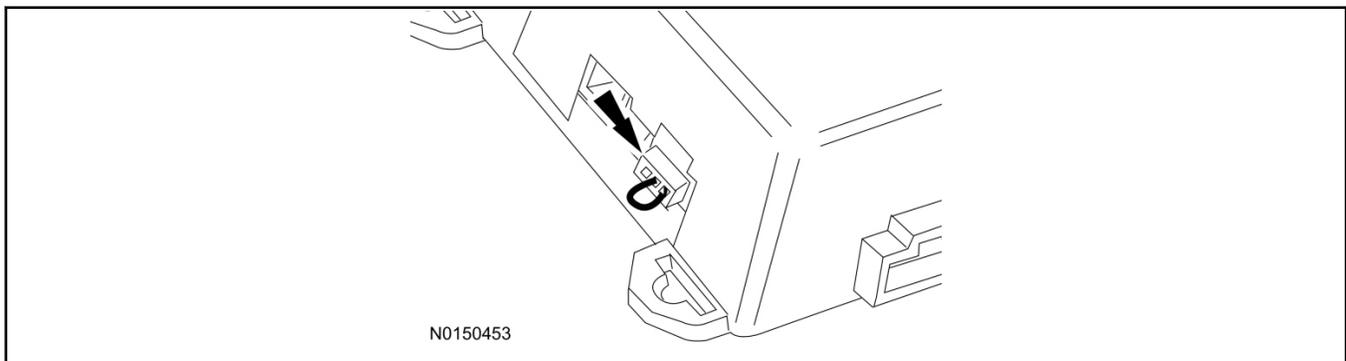
RMST Activation - Vehicles Without Factory Remote Start Only

NOTE:
For vehicles equipped with factory remote start, proceed to the "Programming Key Fobs" section of this manual.

46. Cycle ignition OFF, ON, OFF one time to learn RMST to the vehicle.

47. Verify that the IDS is updated to the most current version.

48. Connect IDS.

INSTALLATION (Continued)

- Follow the prompts to select new vehicle session.

- Enter VIN.

49. Activate the remote start using the IDS.

    - Select the Tool Box icon.

    - Select Module Programming.

    - Select Programmable Parameters.

    - Select Remote Start.

N0151675
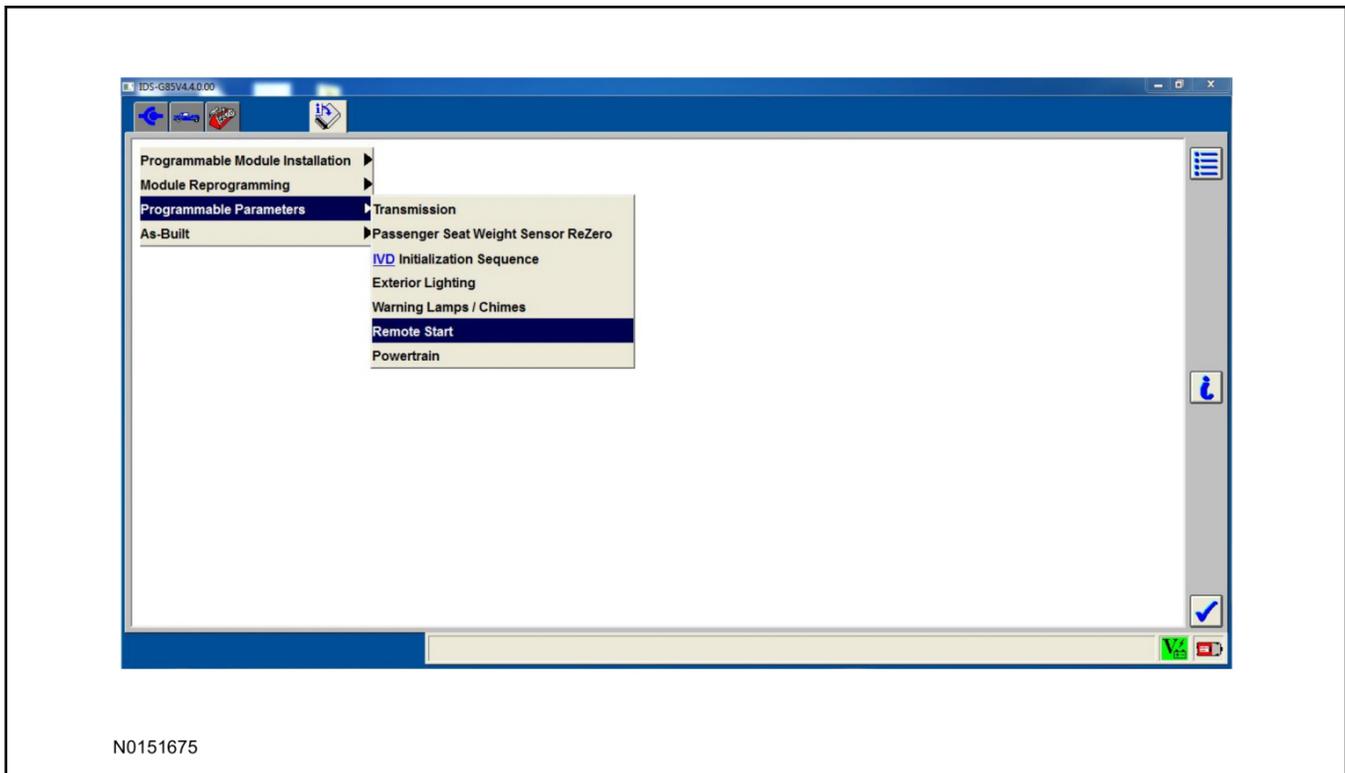
50. Verify that the instructions on the IDS screen have been completed and continue until you reach the screen below.

    - From this screen, you must select the feature and then select the "Enabled" text (to the right) for these items:

        ▪ Remote Start - (BdyCM)

        ▪ Climate Control - (IC)

        ▪ Remote Start -(IC)

        ▪ Hood Switch - (BdyCM) set to "PRESENT" (new for 2017MY)

    - Select the feature and then select the "Enabled" text (to the right) for these items if the vehicle includes the optional feature:

        ▪ Driver Seat - (IC)

        ▪ Passenger Seat - (IC)

INSTALLATION (Continued)

> ▪ Rear Defrost - (IC)
>
> ▪ Steering Wheel Control - (IC)
>
> **NOTE:**
> The Steering Wheel Control item refers to the heated steering wheel feature.
> The Driver Seat and Passenger Seat items refer to climate controlled seating.

- Once all appropriate items have been enabled, select the Tick button to direct IDS to enable the remote start option on the vehicle.

N0176708
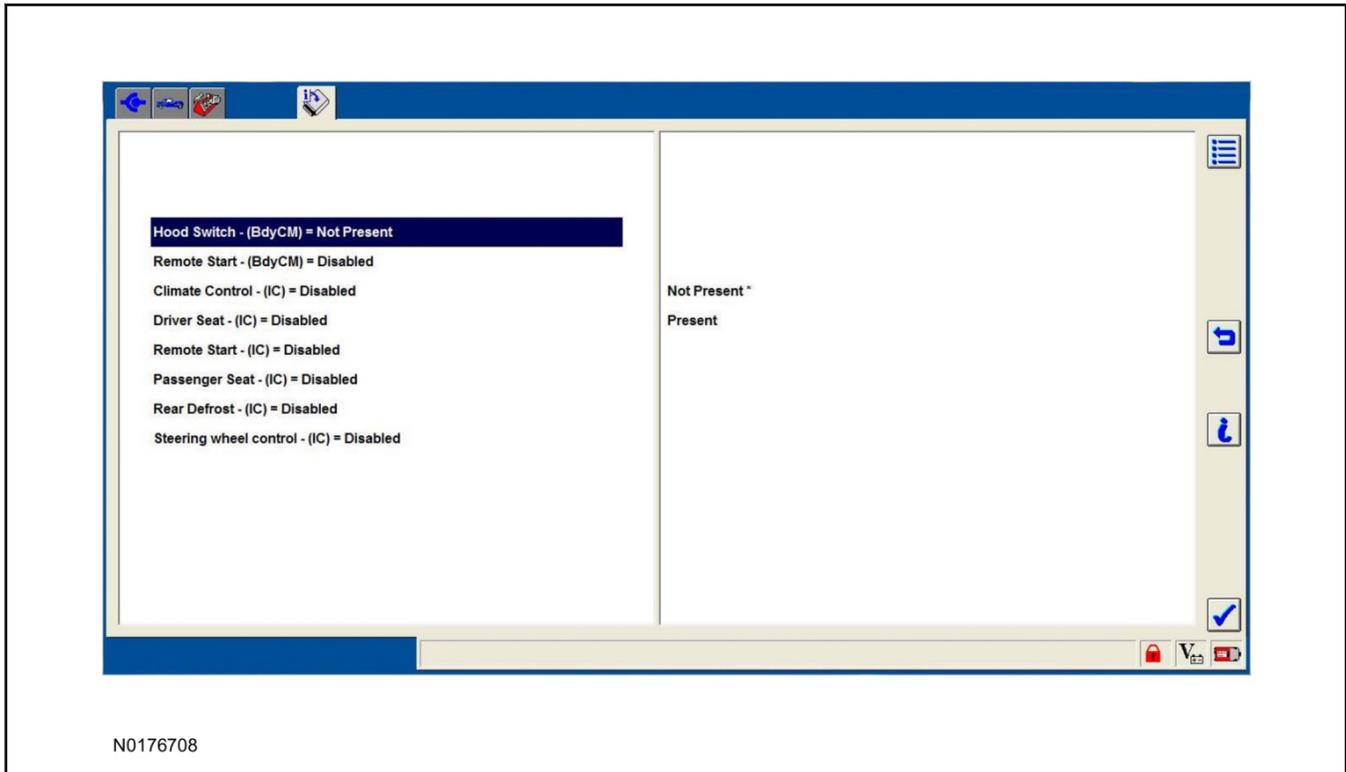
51. For vehicles equipped with standard message center, verify that the remote start option now appears.

   - 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.

52. 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.

Programming Key Fobs

N0162546
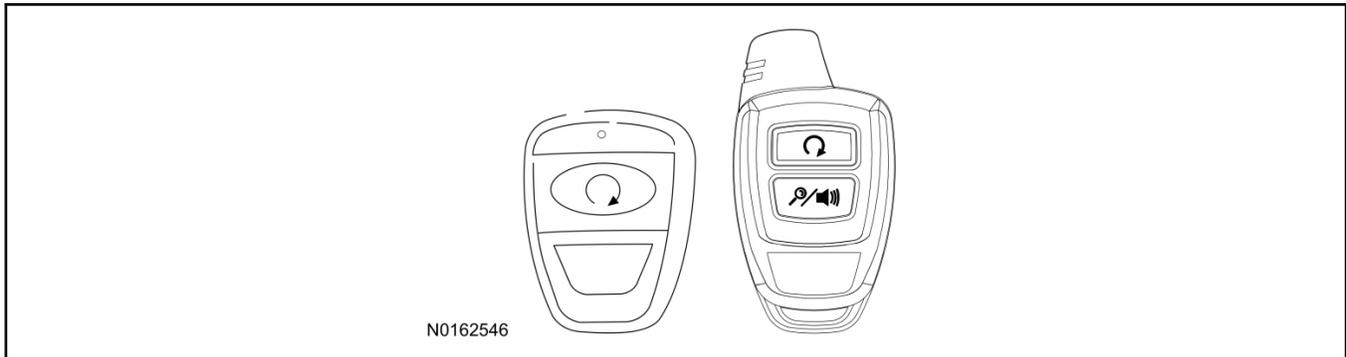
53. **NOTE:**
These steps must be performed with the VSS module security jumper removed if previously installed. For additional information refer to "VSS Module - Optional Vehicle Security Features".

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

1 Open door and press unlock.

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

3 Depress and hold brake pedal.

4 Press the start/stop button.

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

6 Repeat steps 3 and 4 an additional five times, ending in ignition ON, engine ON.

7 Release the brake pedal, the horn should honk 3 times.

8 Press the start stop/button on each fob you wish to program. The horn should honk each time the button is pressed to indicate the transmitter has been programmed.

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.

54. Make sure the shift lever is in PARK and the ignition is in the OFF position. Remove all keys from the vehicle.

55. Close the hood.

INSTALLATION (Continued)

56. Close all of the vehicle doors.

57. Start the vehicle by pressing the remote start button twice on the remote start key fob.

58. Confirm the remote start works with the vehicle in park and with the hood and doors closed.

59. Open the hood.

60. Confirm the engine shuts off.

61. Check the instrument cluster after remote start has completed. If the "To Drive: Press Brake and Start Button" message continues to be displayed after an ignition cycle, check for Special Service Messages (SSM's) for the vehicle to resolve the issue.

62. **NOTE:**
Vehicle doors should be closed while performing this step.

Attempt to remote start with the hood open. 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.**

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

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

NOTE:
VSS must be learned to vehicle prior to installing remote access on key start equipped vehicles.

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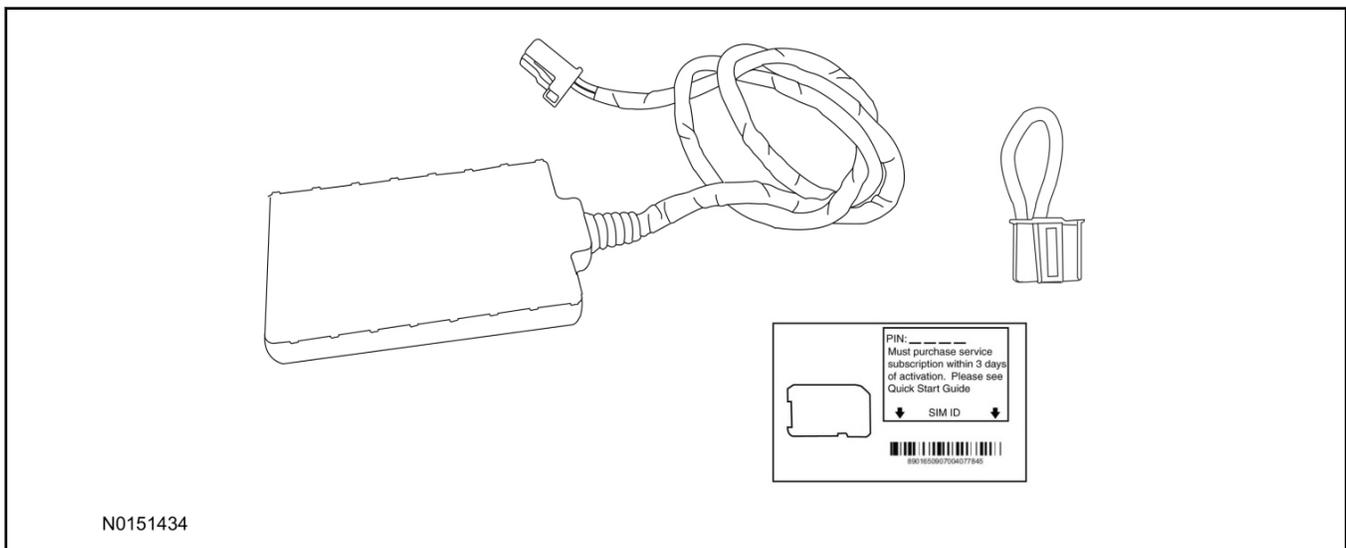
64. Review the RMU upgrade components.

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

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

INSTALLATION (Continued)

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

| 5	Tie Wraps (not shown)

⚠ **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.

65. Using a tie-strap, secure the RMU to the bulkhead wire harness located behind the Body Control Module (BCM).


N0163942
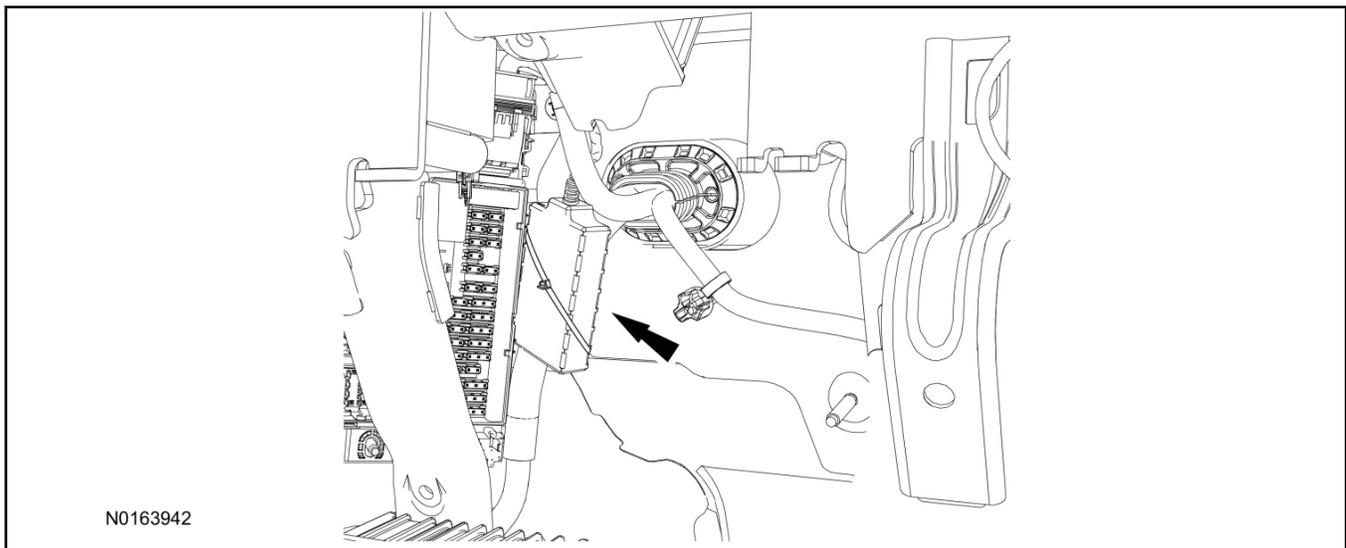
66. Connect the RMU electrical connector to the VSS module.

• Secure the harness with tie-straps.

N0151368
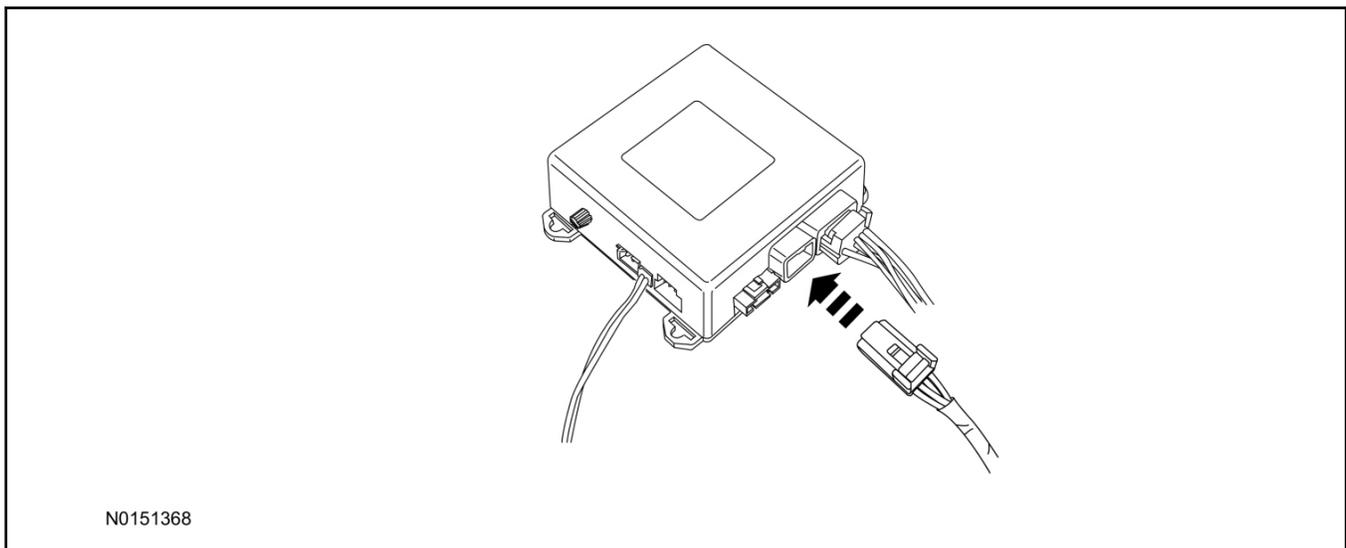
INSTALLATION (Continued)

### Perimeter Alarm Activation - Vehicles Without Factory Installed Perimeter Alarm

67. Verify that the IDS is updated to the most current version.

68. Connect IDS.

   • Follow the prompts to select new vehicle session.

   • Enter VIN.

69. Activate the perimeter alarm using the IDS.

   • Select the Tool Box icon.

   • Select Module Programming.

   • Select Programmable Parameters.

   • Select Security.
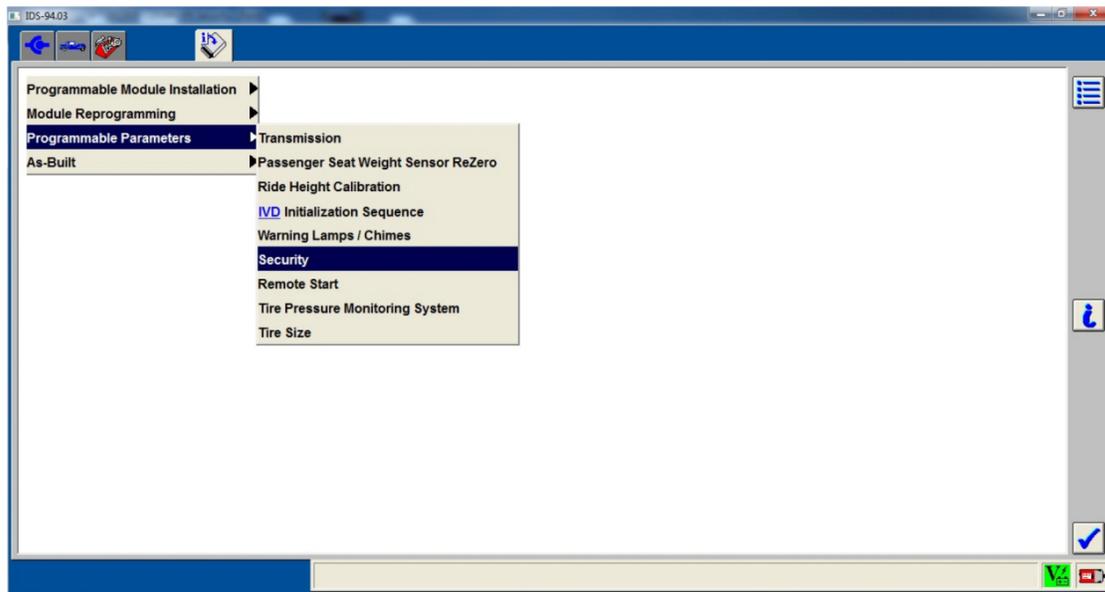
N0164680

INSTALLATION (Continued)

70. Verify that the instructions on the IDS screen have been completed and continue until you reach the screen below.

- From this screen, select the "Enabled" text to the right of "Perimeter Alarm - (BdyCM)".

- Once "Enabled" has been selected, select the Tick button to direct IDS to enable the perimeter alarm option on the vehicle.
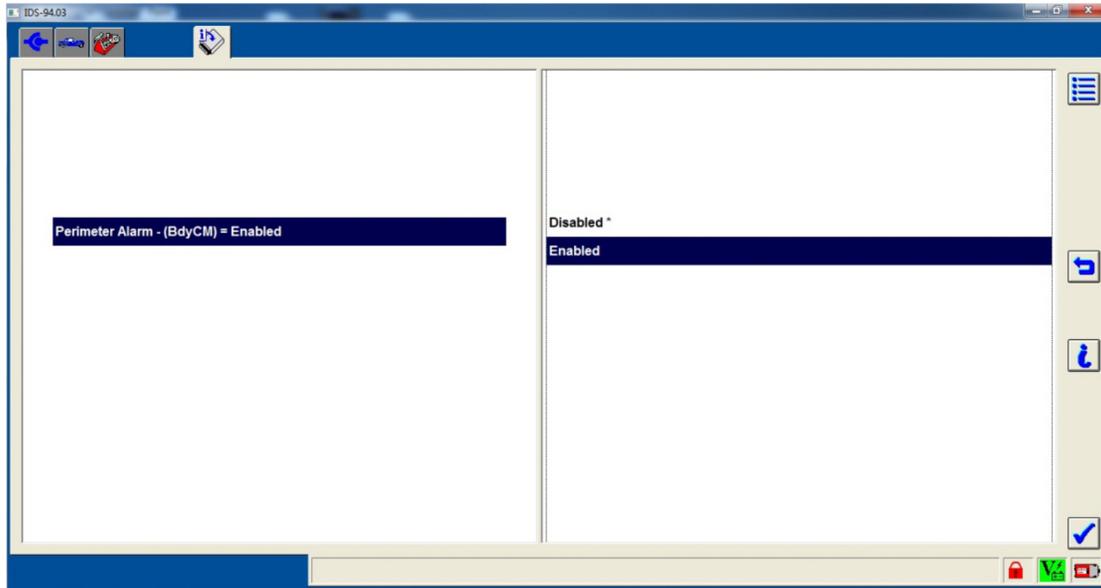
N0164681

INSTALLATION (Continued)

71. Activate the hood switch monitor using IDS (NEW for 2017MY).

   - Select the Tool Box icon.

   - Select Module Programming.

   - Select Programmable Parameters.

   - Select Remote Start.

N0151675
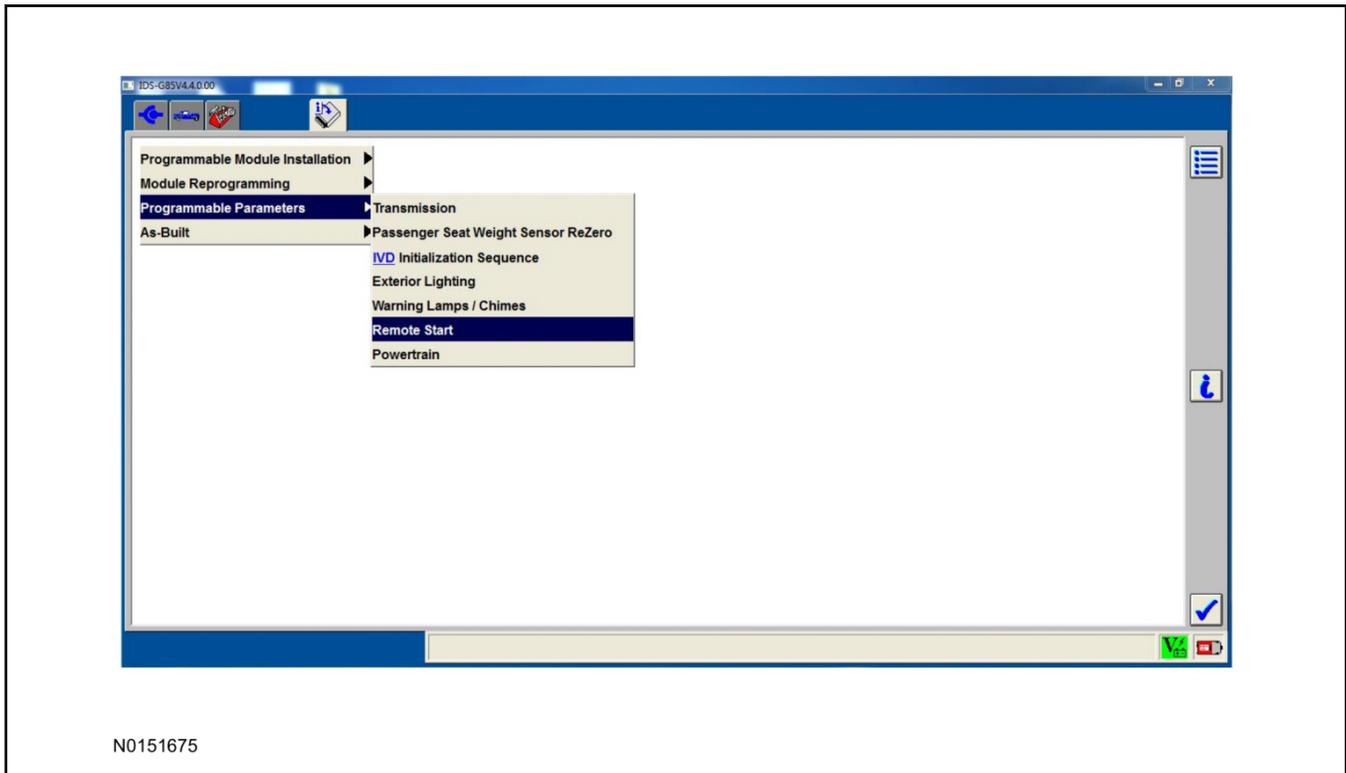
72. Verify that the instructions on the IDS screen have been completed and continue until you reach the screen below.

   - From this screen, select the "Present" text to the right of "Hood Switch - (BdyCM)".

   - Once "Present" has been selected, select the Tick button to direct IDS to enable hood switch monitoring on the vehicle.

INSTALLATION (Continued)

N0176708
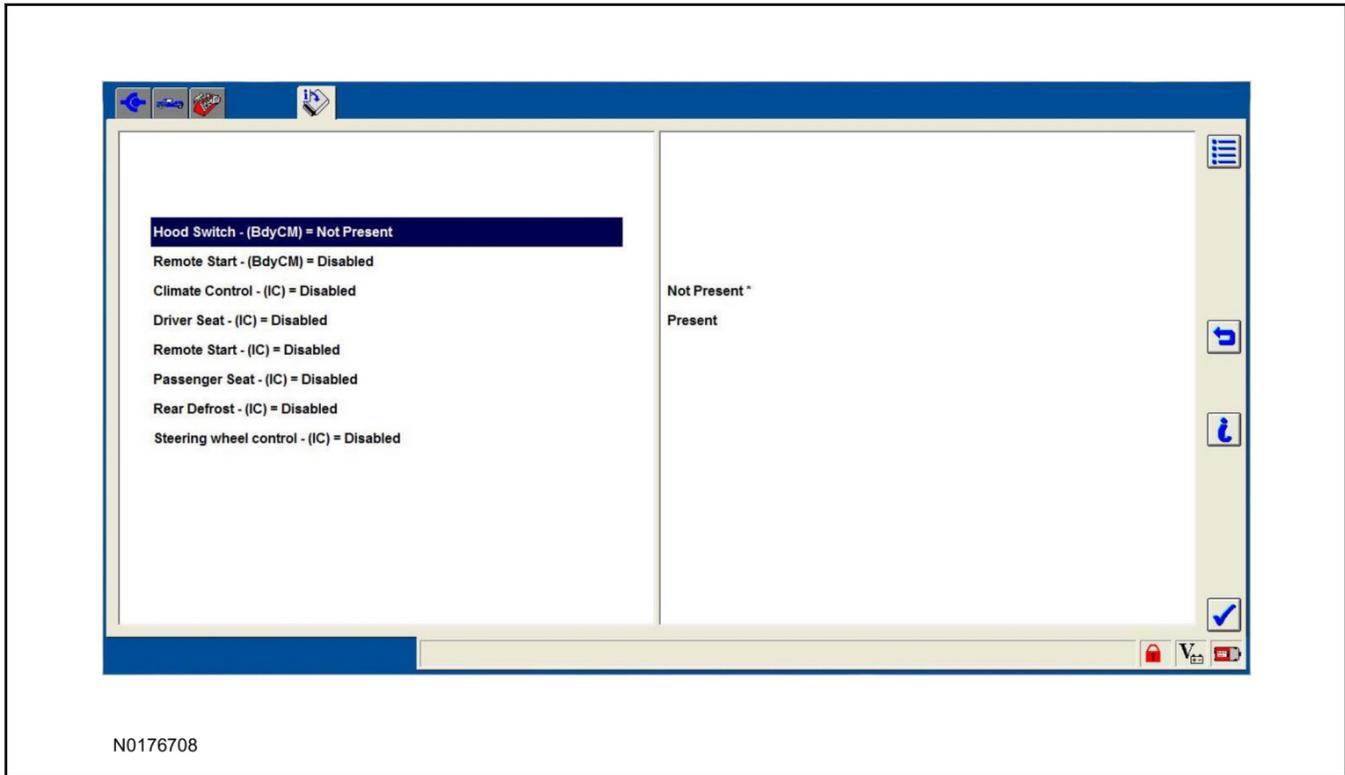
VSS Module - Optional Vehicle Security Features

73. 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**.

N0150453
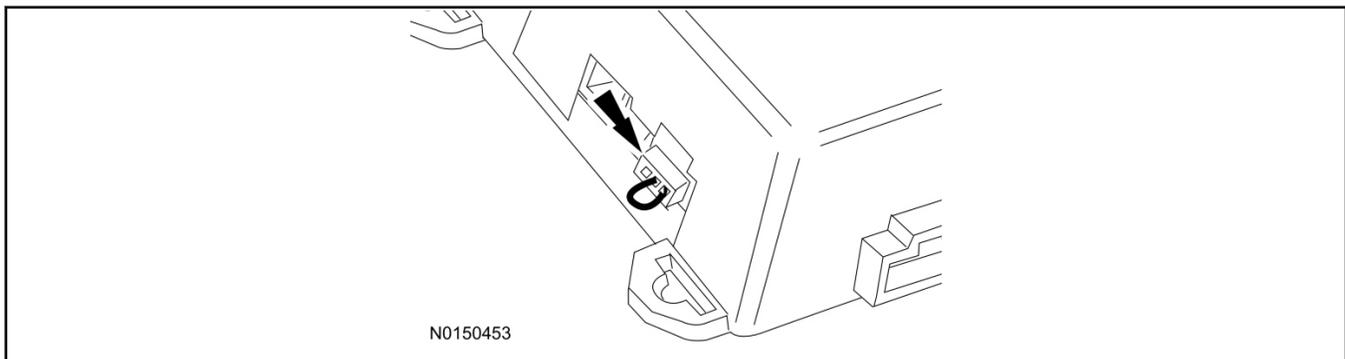
Remote Start Activation - Vehicles Without Factory Remote Start Only

74. Cycle ignition OFF, ON, OFF one time to learn RMST to the vehicle.

75. Verify that the IDS is updated to the most current version.

76. Connect IDS.

    • Follow the prompts to select new vehicle session.

    • Enter VIN.

INSTALLATION (Continued)

77. Activate the remote start using the IDS.

 • Select the Tool Box icon.

 • Select Module Programming.

 • Select Programmable Parameters.

 • Select Remote Start.

N0151675
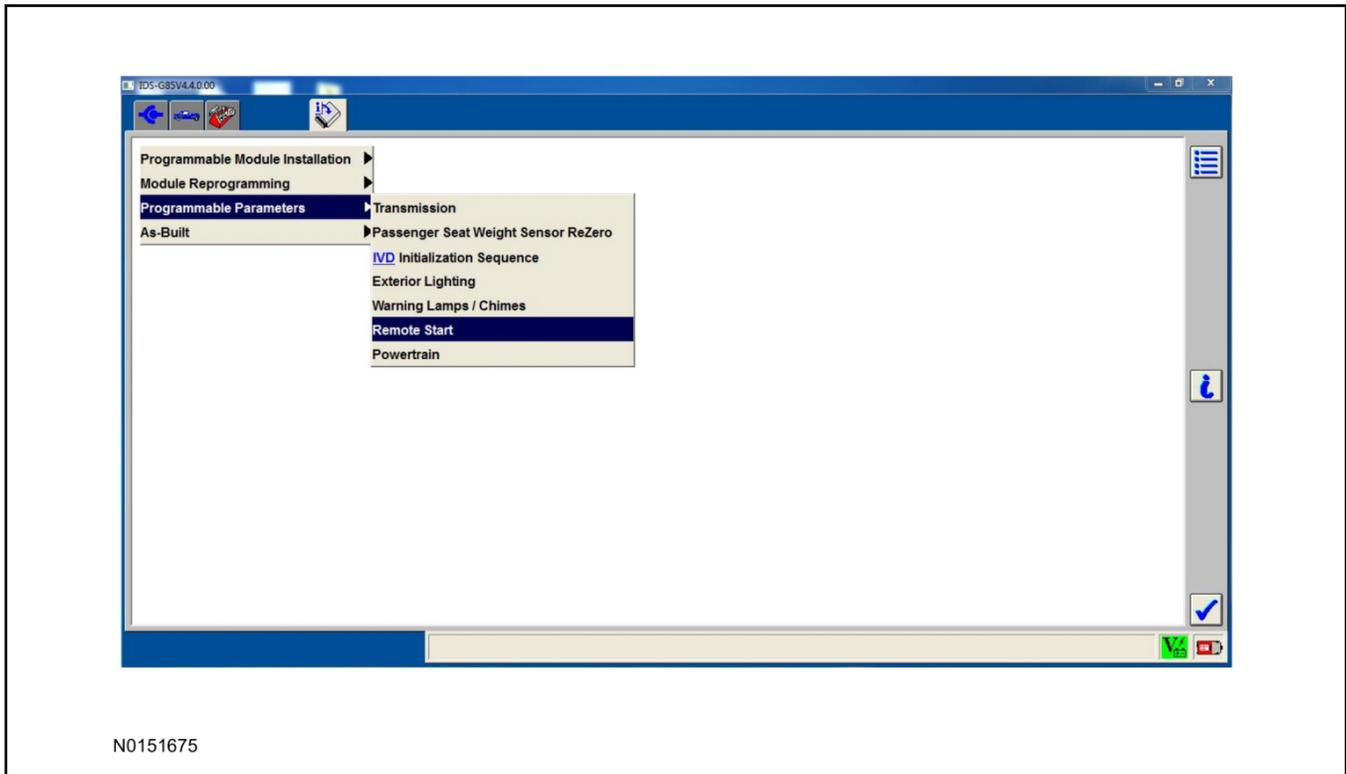
78. Verify that the instructions on the IDS screen have been completed and continue until you reach the screen below.

 • From this screen, you must select the feature and then select the "Enabled" text (to the right) for these items:

 ▪ Remote Start - (BdyCM)

 ▪ Climate Control - (IC)

 ▪ Remote Start -(IC)

 ▪ Hood Switch - (BdyCM) set to "PRESENT" (new for 2017MY)

 • Select the feature and then select the "Enabled" text (to the right) for these items if the vehicle includes the optional feature:

 ▪ Driver Seat - (IC)

 ▪ Passenger Seat - (IC)

 ▪ Rear Defrost - (IC)

INSTALLATION (Continued)

- ▪ Steering Wheel Control - (IC)

  NOTE:
  The Steering Wheel Control item refers to the heated steering wheel feature.
  The Driver Seat and Passenger Seat items refer to climate controlled seating.

- • Once all appropriate items have been enabled, select the Tick button to direct IDS to enable the remote start option on the vehicle.

N0176708
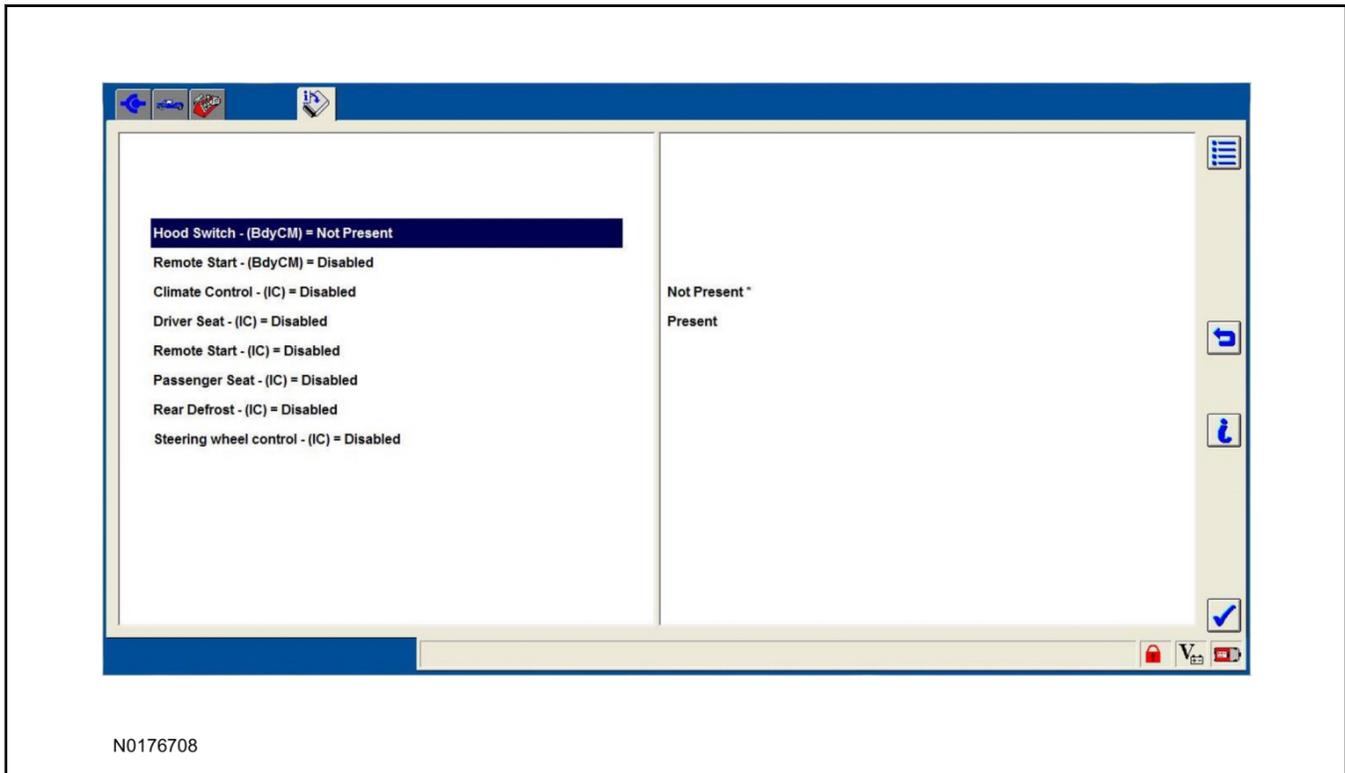
79. For vehicles equipped with standard message center, verify that the remote start option now appears.

   - • 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.

80. 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.

INSTALLATION (Continued)

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.

81. 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

82. 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.

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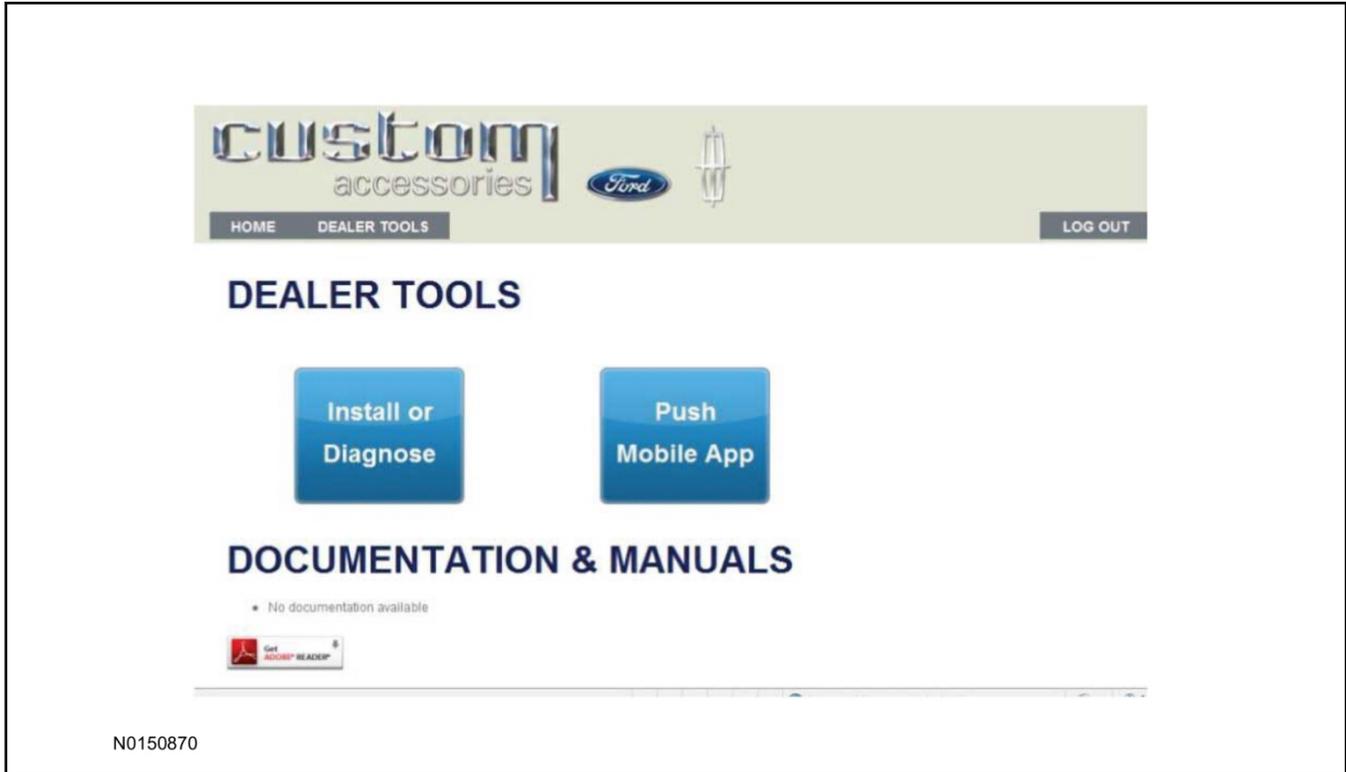
83. Once on the "Install" page, enter the SIM ID code that was provided with the RMST kit. Select "Begin or Continue Installation".

N0150580
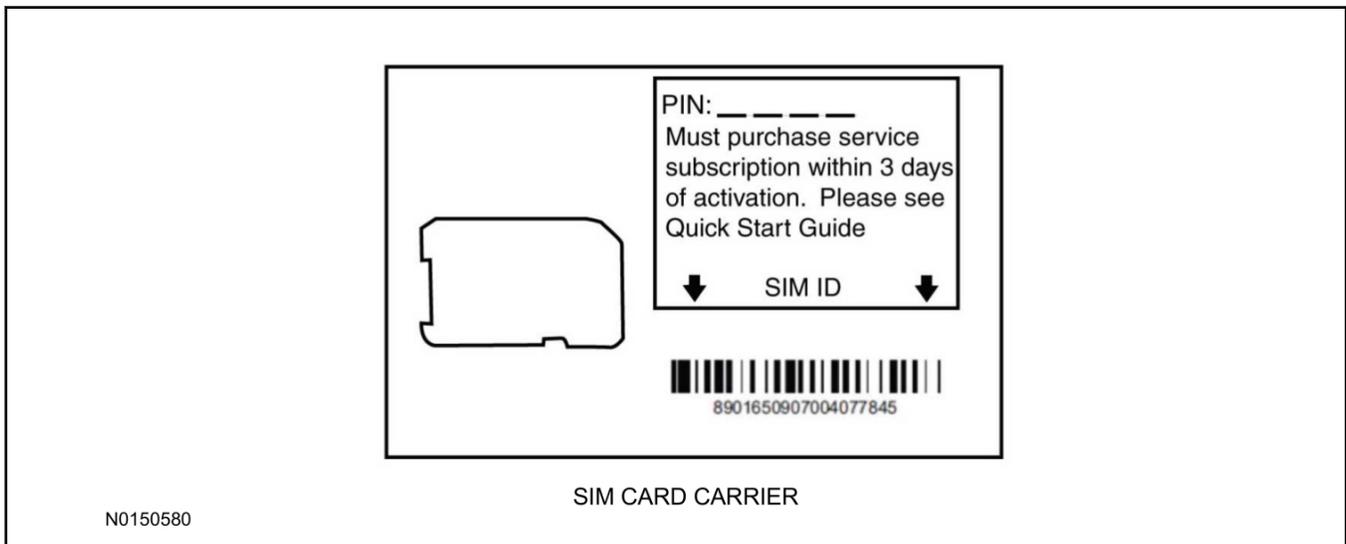
INSTALLATION (Continued)

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

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.

NOTE:

On screen Step 3 shown below.
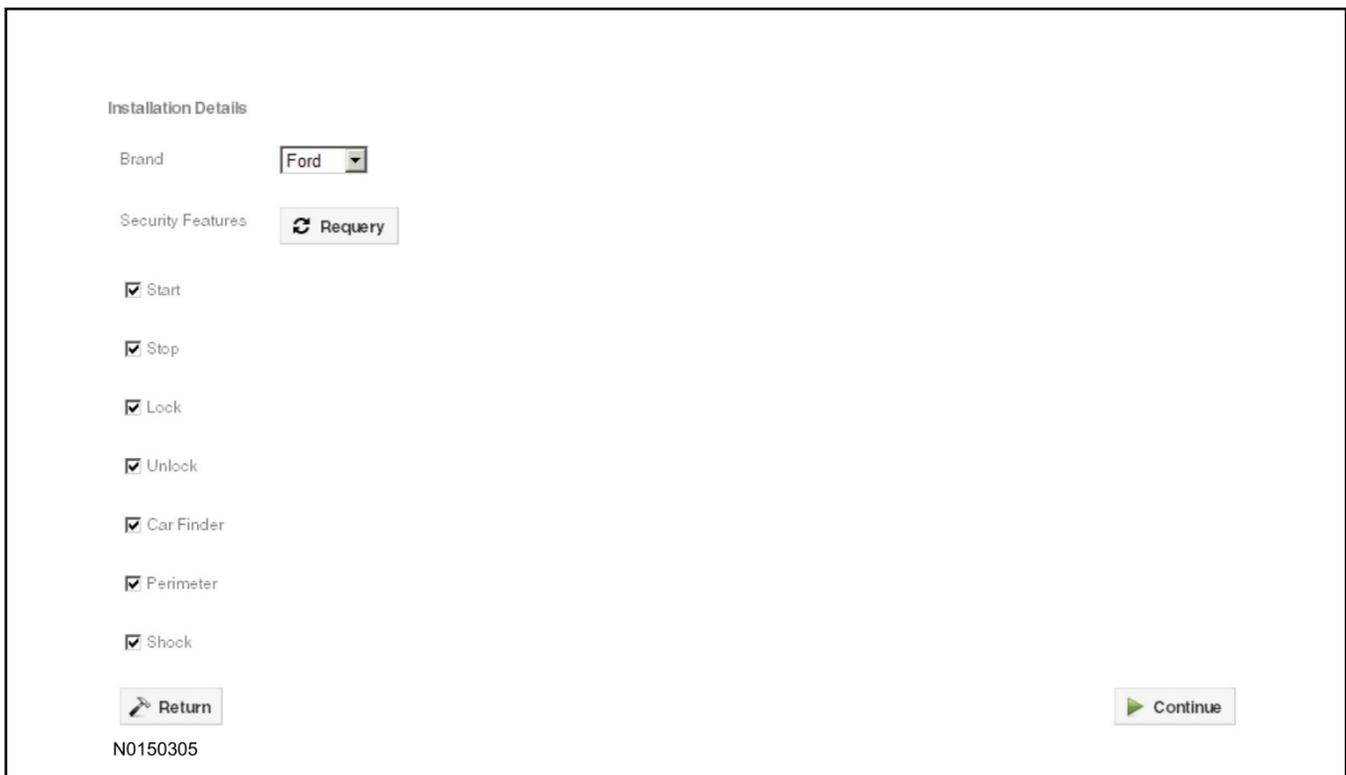
Installation Details

Brand   Ford

Security Features   ⟳ Requery

☑ Start

☑ Stop

☑ Lock

☑ Unlock

☑ Car Finder

☑ Perimeter

☑ Shock

⚒ Return   ▶ Continue

N0150305

85. **NOTE:**

On screen Step 4 shown below.

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)

INSTALLATION (Continued)

Installation Test

Session Status ✔ Yes

Network Connection ✔ Yes

IP Assigned ✔ 10.64.17.233

Comm Established ✔ Yes

Received IMEI ✔ 358901041730422

Received ESN ✔ 1663000117

Your install has been tested successfully. If you would like to test the physical functions of the module, you can do so below.

🌐 Start 🌐 Stop 🌐 Lock 🌐 Unlock 🌐 Car Finder 🌐 Signal

🔧 Return   ▶ Continue

N0150677

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.

Vehicles Without Factory Remote Start 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 VSS to Vehicle" section in this manual.

86. Check the instrument cluster after remote start has completed. If the "To Drive: Press Brake and Start Button" message continues to be displayed after an ignition cycle, check for Special Service Messages (SSM's) for the vehicle to resolve the issue.

All Vehicles

87. 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.

88. 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.