Vehicle Security / Remote Start / Remote Access System Installation

Vehicles With Automatic Temperature Control

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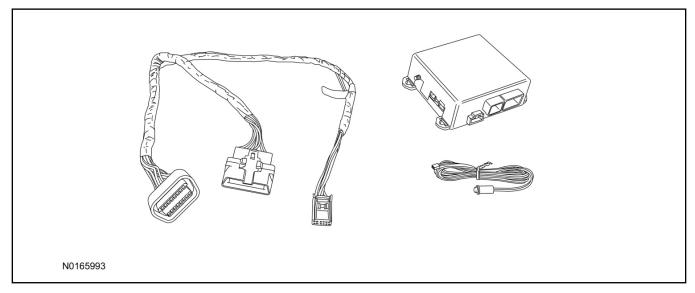
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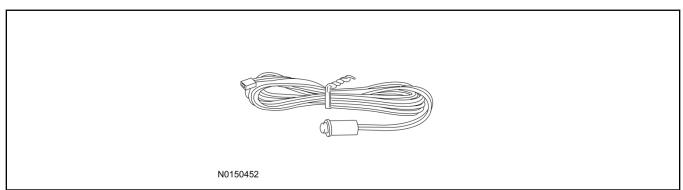
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INSTALLATION

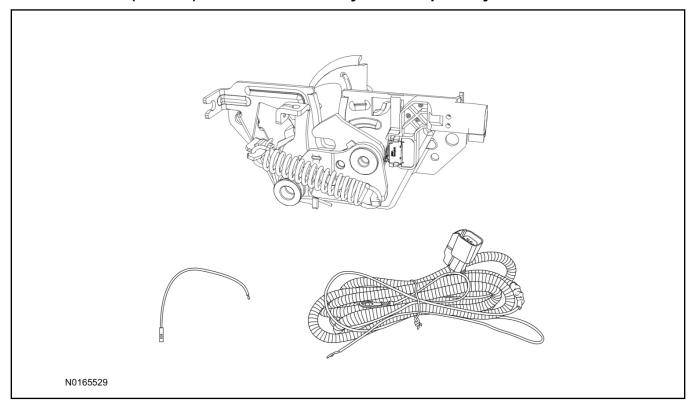
Vehicle Security / Remote Start / Remote Access - Transit Connect VSS System Components



Security Indicator LED (19D596) "Optional"



Hood Latch Kit (19G366) - Base Vehicles Only "Sold Separately"



Transit Connect

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
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

Hood Latch Kit Contents (if required) "Sold Separately"

4. Review the Hood Latch kit contents.

Hood Latch Kit "Sold Separately"

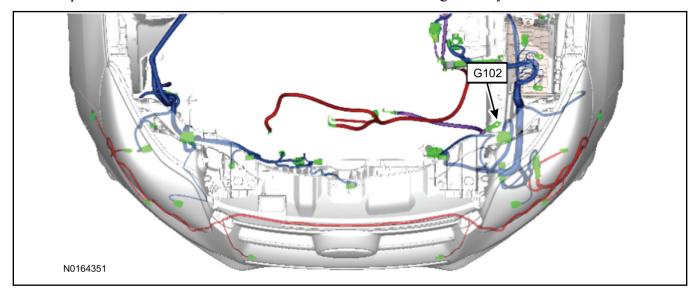
QUANTITY	DESCRIPTION
1	Hood Latch Assembly
Hood Latch Kit "Sold Separately"	
1	Body Control Module (BCM) Terminal Wire
1	Hood Latch Wire Harness
10	Tie Wraps (Not Pictured)

Hood Latch Kit - "Sold Separately"

NOTE:

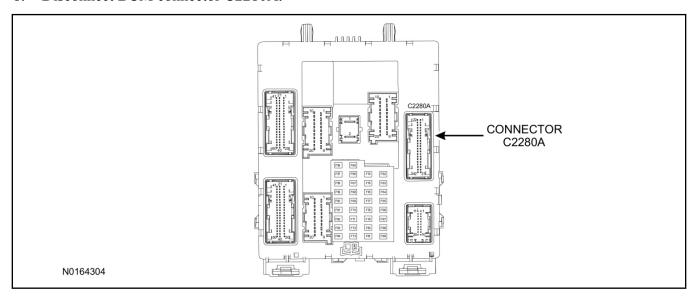
Hood latch installation is required if the vehicle is being upgraded to VSS/RMST/RMU and is not currently equipped with a hood switch.

- 5. Install a new hood latch equipped with switch. For additional information, refer to WSM Section 501-14.
- 6. Route the hood latch wire harness to ground G102 located on the LH side of the engine compartment in front of the air cleaner. Attach the hood latch ground eyelet to G102.

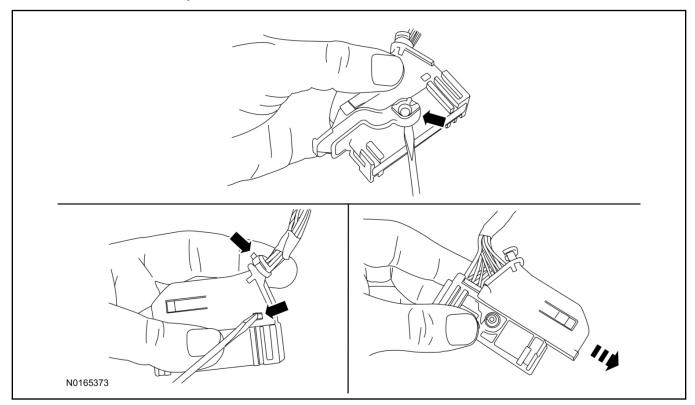


- 7. Route the hood latch wire harness into the vehicle through the bulkhead grommet on the passenger side.
 - Secure the hood latch wire harness with tie-straps.

8. Disconnect BCM connector C2280A.



- 9. Separate the rear cover and lock from BCM connector C2280A.
 - 1 Gently pry up on both sides of the lock mechanism to remove the lock.
 - 2 Remove the tie wrap from the end of the cover and press the retaining tab on both sides to release the cover from the connector.
 - 3 Slide the cover away from the wire harness to remove.



- 10. If equipped, remove the pin plug from BCM connector C2280A Pin 15.
 - If the vehicle is not equipped with a hood switch from the factory, C2280A will not have a wire at the Pin 15 location.

11 NOTICE:

Check that all wire pins are attached firmly and properly positioned/secured within the connector shell, after performing this step.

Insert the white BCM terminal wire from the hood switch wire harness kit into BCM connector C2280A Pin 15.

- 12. Attach the rear cover and lock to BCM connector C2280A.
 - 1 Slide the cover onto the connector.
 - 2 Verify the cover retaining tabs are engaged on each side of the connector and install a new tie wrap on the end of the cover.
 - 3 Snap the lock onto the pivot mechanism on both sides of the connector.
- 13. Connect BCM connector C2280A.
- 14. Connect the hood latch wire harness wire to the BCM Terminal Wire.
 - Secure the wire harness assembly with tie-straps.

I. VSS System Installation

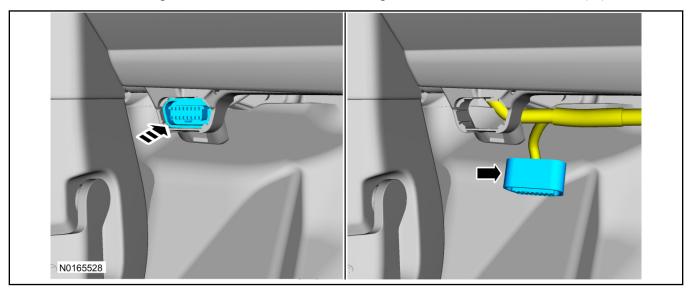
⚠ CAUTION:

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

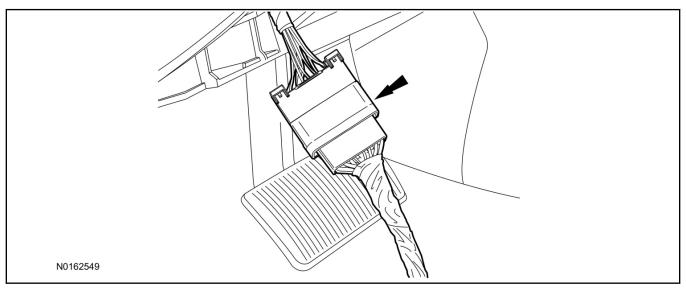
NOTE:

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

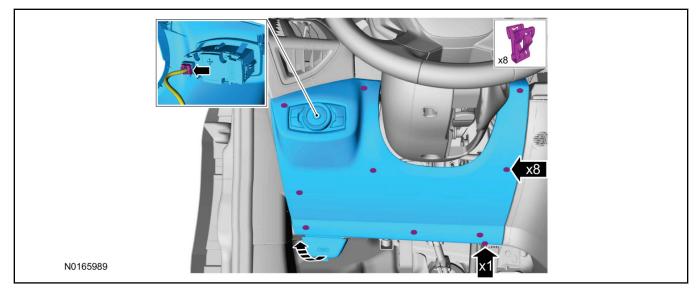
15. Release the rear clip and detach the vehicle's OBD II port from the Instrument Panel (IP) frame.



16. Connect the VSS T-harness to the OBD II port.



- 17. Attach the vehicle's OBD II port to he Instrument Panel (IP) frame.
- 18. Remove the steering column trim panel.
 - 1 Remove the screw.
 - 2 Release the clips, disconnect the electrical connector and remove the steering column trim panel.



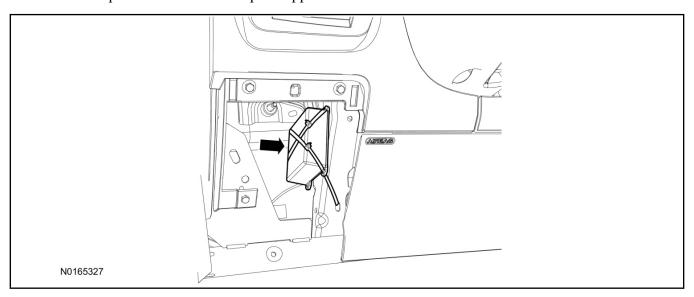
19. Position the VSS harness inside the IP being careful to avoid sharp edges and moving parts.

20. **NOTE:**

Data Link Connector (DLC) access panel removed for clarity.

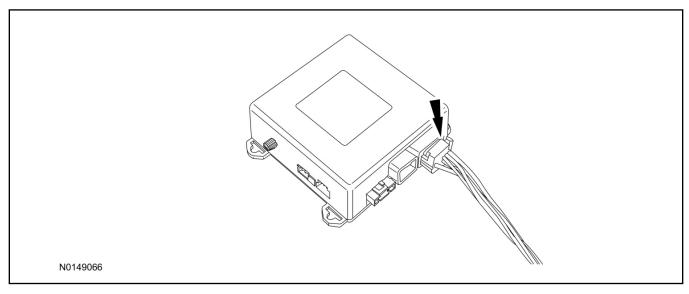
Using tie-straps, secure the VSS module to the IP frame.

- Ensure the VSS module is positioned so the shock sensor adjustment knob can be accessed for later use.
- Tie-strap the VSS module loops at opposite corners.



21. Connect the VSS harness to the VSS module.

• Secure the VSS harness with tie-straps.



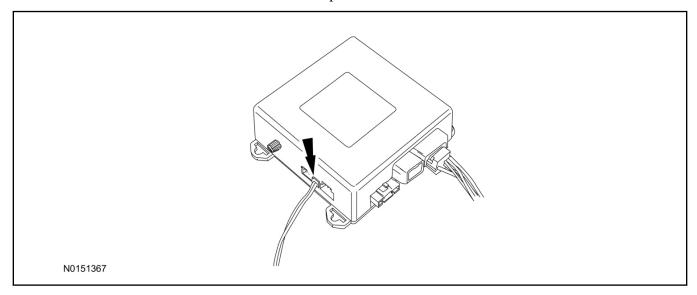
- 22. Install the steering column trim panel.
 - 1 Connect the electrical connector and install the steering column trim panel.
 - 2 Install the screw.
 - 3 Tighten screw to 22 lb.in (2.5 Nm).

Optional Security Indicator LED Mounting

A CAUTION:

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

- 23. 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.
- 24. 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.
- 25. Route the LED wire harness to the VSS module.
- 26. Connect the LED wire harness to the VSS module 2-pin white connector.
 - Secure the LED wire harness with tie-straps.



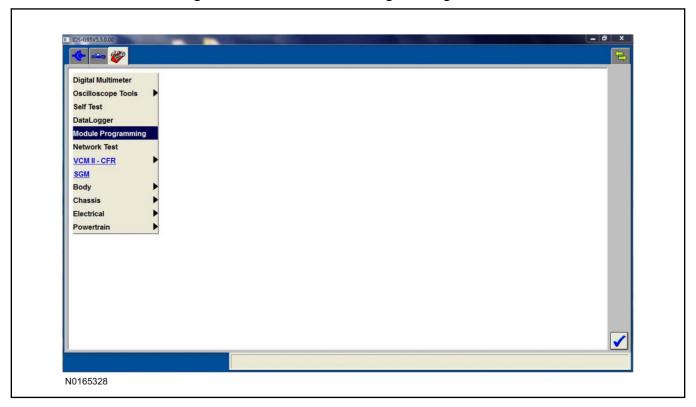
Perimeter Alarm Activation - Key Start Only

NOTE:

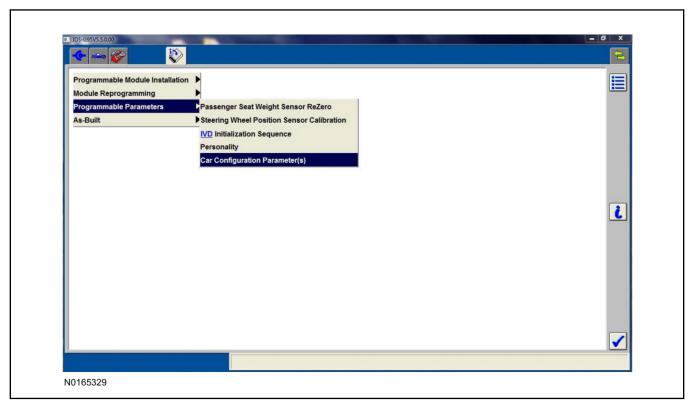
IDS must be connected to the internet during perimeter alarm activation.

- 27. Cycle ignition OFF, ON, OFF one time to learn VSS to the vehicle.
- 28. Verify that the IDS is updated to the most current version.
- 29. Connect IDS.
 - Follow the prompts to select new vehicle session.
 - Enter VIN.

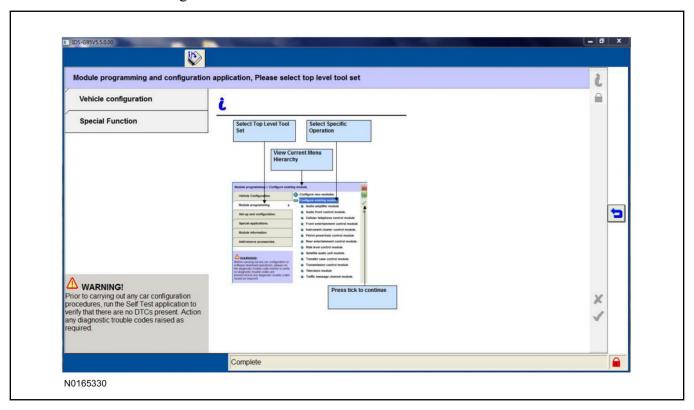
30. Start a new session using IDS and select "Module Programming".



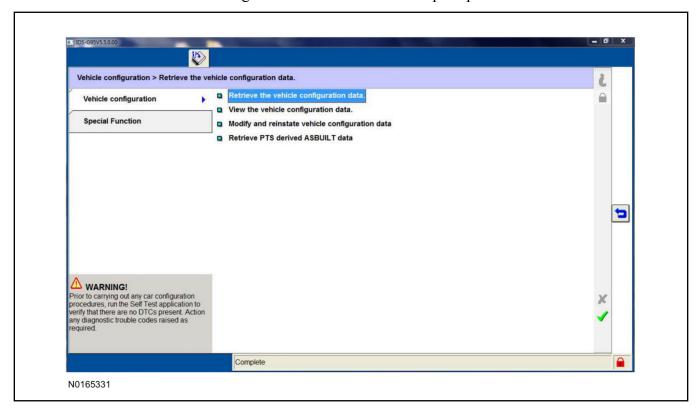
31. Select "Programmable Parameters" and select "Car Configuration Parameter(s)".



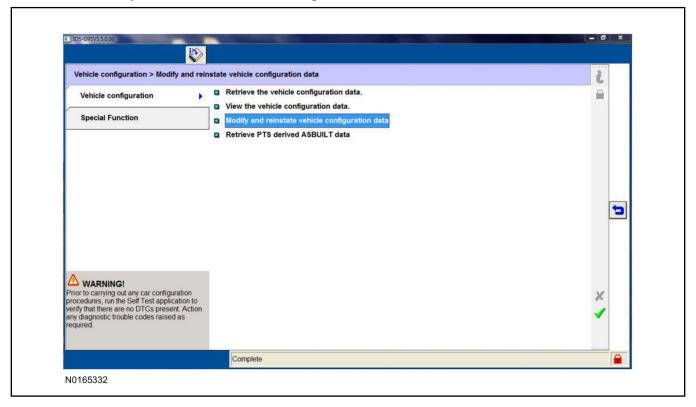
32. Select "Vehicle Configuration".



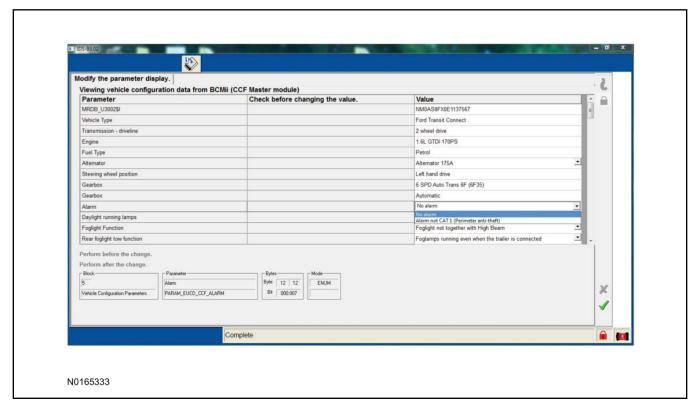
33. Select "Retrieve Vehicle Configuration data" and follow the prompts.



34. Select "Modify and reinstate vehicle configuration data".



35. Identify the "Alarm" parameter and change the value from "No alarm" to "Alarm not CAT 1 (Perimeter anti-theft)".

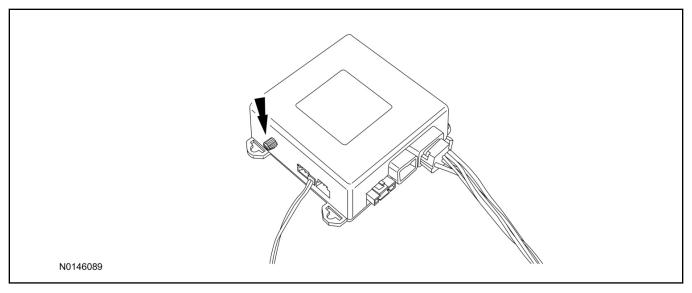


36. Select the Tick mark and download the data back into the vehicle.

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.



- 37. Starting with the adjustment knob in approximately the halfway position, lower the driver's window and exit the vehicle.
- 38. Press the LOCK button on the vehicle's RKE fob to arm the VSS system. The LED will light solid for 10-15 seconds and then begin to flash a steady on/off sequence to indicate the system is armed.
- 39. 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.
- 40. 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.
- 41. 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.
- 42. Install the steering column shrouds. For additional information, refer to WSM Section 501-05.

VSS Functional Test

NOTE:

If installed, observe the LED while performing these tests.

NOTE:

Cycle ignition OFF, ON, OFF before testing.

- 43. 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 15 seconds while the VSS system pre-arms, after which it will flash every 3-4 seconds in fully armed mode.
- 44. Reach inside the window and press the door unlock trim switch (door will not unlock). 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, the alarm will trigger instantly upon door opening.
 - 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.
- 45. 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.
- 46. Test all other vehicle doors, the hood and the trunk in the same manner, by setting off the alarm and disarming with the keyfob.
- 47. Please contact 1-800-FORD-KEY with any issues regarding hardware or kit contents.

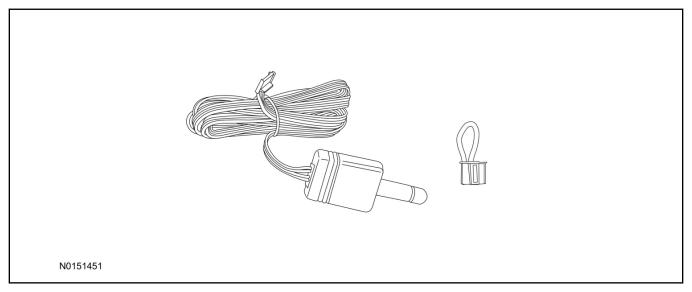
II. Remote Start (RMST) Upgrade - Antenna Kit "Sold Separately"

△ CAUTION:

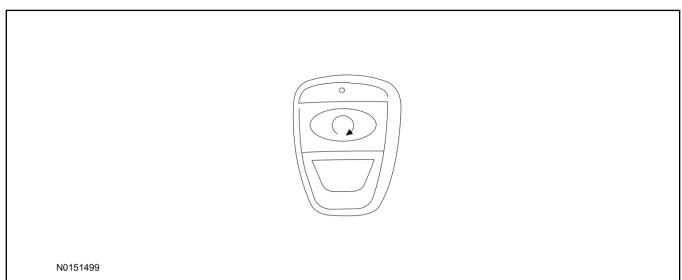
Carefully route and secure module and harnesses so that they do not interfere with moving parts or linkages.

NOTE:

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



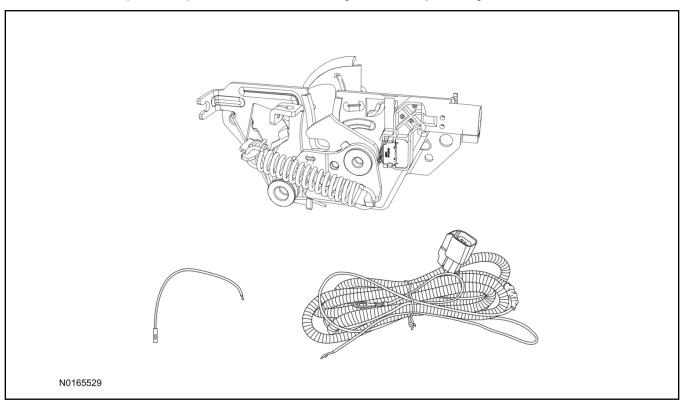
Standard Key Fob (15K601) "Sold Separately"



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



Hood Latch Kit (19G366) - Base Vehicles Only "Sold Separately"



Optional RMST Upgrade Components "Sold Separately"

48. Review the RMST Upgrade components.

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

QUANTITY	DESCRIPTION
1	Bi-directional Antenna
1	Security Jumper

Standard Key Fob (15K601) "Sold Separately"

QUANTITY	DESCRIPTION
1	Standard Key Fob (15K601)

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

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

Hood Latch Kit Contents (if required) "Sold Separately"

49. Review the Hood Latch kit contents.

Hood Latch Kit "Sold Separately"

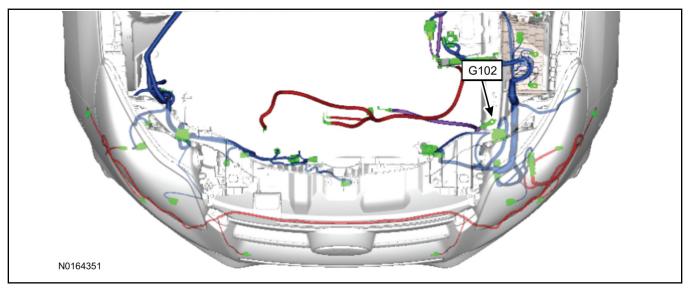
QUANTITY	DESCRIPTION
1	Hood Latch Assembly
Hood Latch Kit "Sold Separately"	
1	Body Control Module (BCM) Terminal Wire
1	Hood Latch Wire Harness
10	Tie Wraps (Not Pictured)

Hood Latch Kit - "Sold Separately"

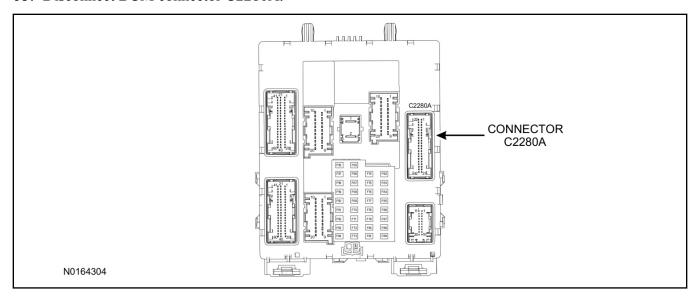
NOTE:

Hood latch installation is required if the vehicle is being upgraded to VSS/RMST/RMU and is not currently equipped with a hood switch.

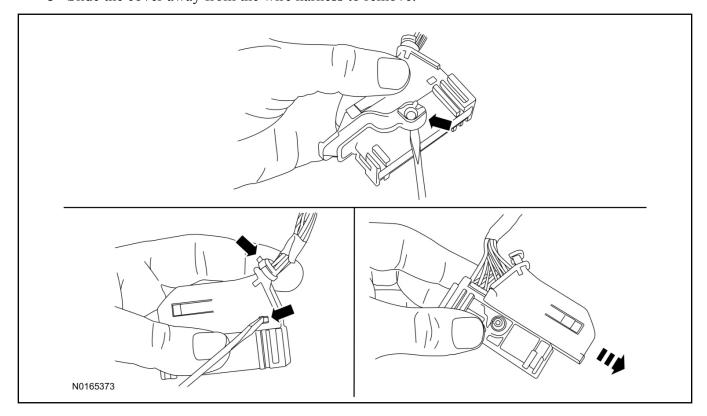
- 50. Install a new hood latch equipped with switch. For additional information, refer to WSM Section 501-14.
- 51. Route the hood latch wire harness to ground G102 located on the LH side of the engine compartment in front of the air cleaner. Attach the hood latch ground eyelet to G102.



- 52. Route the hood latch wire harness into the vehicle through the bulkhead grommet.
 - Secure the hood latch wire harness with tie-straps.
- 53. Disconnect BCM connector C2280A.



- 54. Separate the rear cover and lock from BCM connector C2280A.
 - 1 Gently pry up on both sides of the lock mechanism to remove the lock.
 - 2 Remove the tie wrap from the end of the cover and press the retaining tab on both sides to release the cover from the connector.
 - 3 Slide the cover away from the wire harness to remove.



- 55. If equipped, remove the pin plug from BCM connector C2280A Pin 15.
 - If the vehicle is not equipped with a hood switch from the factory, C2280A will not have a wire at the Pin 15 location.

56. *NOTICE*:

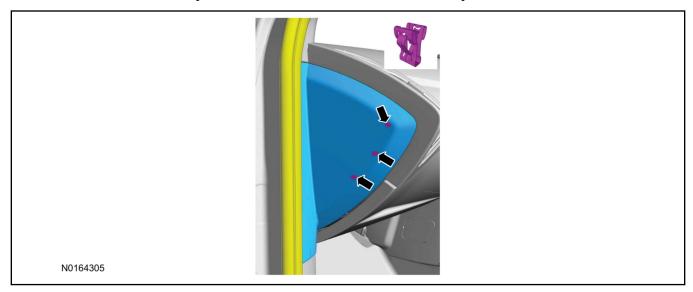
Check that all wire pins are attached firmly and properly positioned/secured within the connector shell, after performing this step.

Insert the white BCM terminal wire from the hood switch wire harness kit into BCM connector C2280A Pin 15.

- 57. Attach the rear cover and lock to BCM connector C2280A.
 - 1 Slide the cover onto the connector.
 - 2 Verify the cover retaining tabs are engaged on each side of the connector and install a new tie wrap on the end of the cover.
 - 3 Snap the lock onto the pivot mechanism on both sides of the connector.
- 58. Connect BCM connector C2280A.
- 59. Connect the hood latch wire harness wire to the BCM Terminal Wire.
 - Secure the wire harness assembly with tie-straps.

RMST Kit Antenna Installation

60. Position the weather strip aside and remove the LH IP side finish panel.



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

62. **NOTE:**

Do not touch the adhesive, reduced adhesion may result.

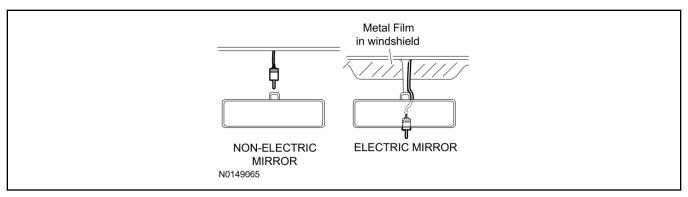
NOTE:

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.

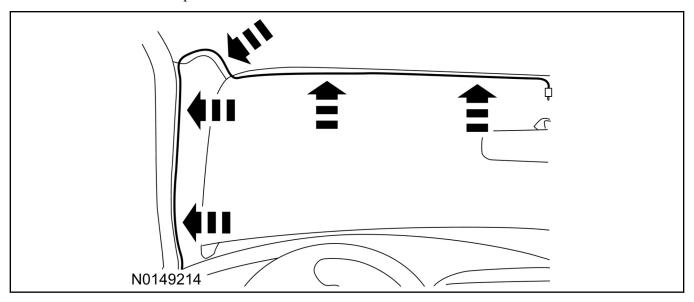


63. If necessary, position the A-pillar trim slightly outward to provide access to route the antenna wire.

NOTE:

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

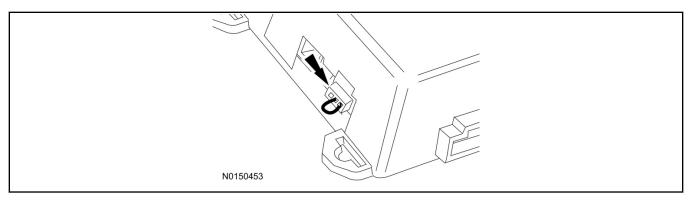
- 64. Route the antenna cable along the headliner and down the A-pillar towards the floor. Continue routing the wire into the IP towards the VSS module.
 - Secure with tie-straps.



- 65. Connect the antenna connector to the VSS module.
- 66. Reposition the A-pillar trim panel back, if necessary.
- 67. Install the LH IP side finish panel and reposition the weatherstrip.

VSS Module - Optional Vehicle Security Features

- 68. 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 and Perimeter Alarm Activation - Key Start Only

NOTE:

ALL STEPS WITHIN THIS ACTIVATION PROCEDURE MUST BE COMPLETED FOR PROPER SYSTEM OPERATION.

NOTE:

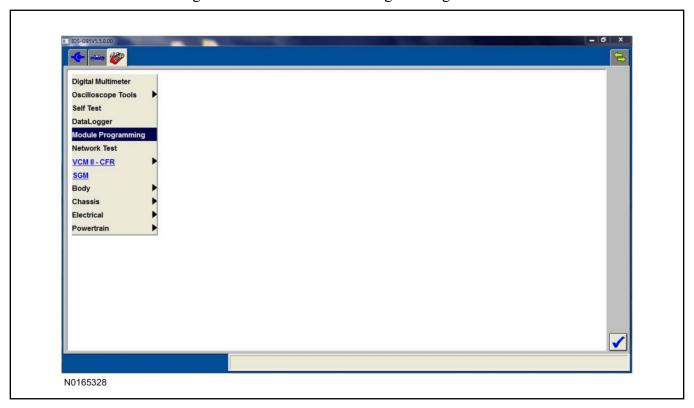
IDS must be connected to the internet during remote start and perimeter alarm activation.

NOTE:

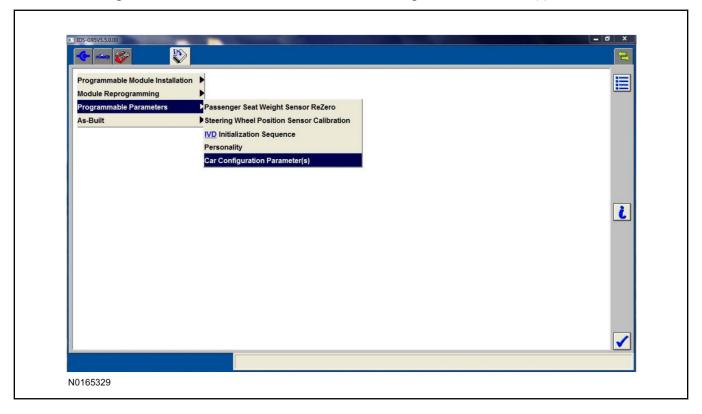
For vehicles equipped with push button start, proceed to "Push Button Start Vehicle" section within the "Programming Key Fobs" section of this manual.

- 69. Cycle ignition OFF, ON, OFF one time to learn RMST to the vehicle.
- 70. Verify that the IDS is updated to the most current version.
- 71. Connect IDS.
 - Follow the prompts to select new vehicle session.
 - Enter VIN

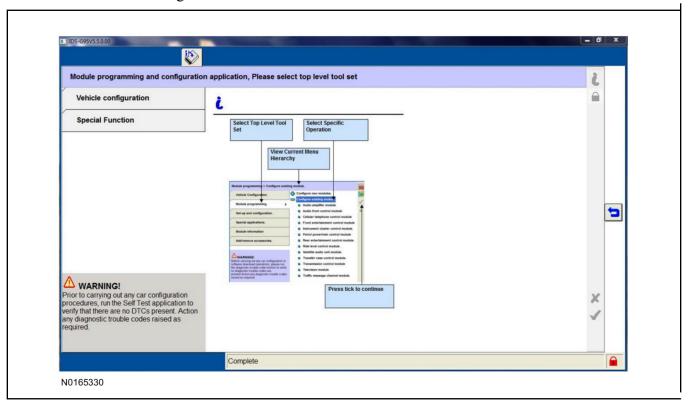
72. Start a new session using IDS and select "Module Programming".



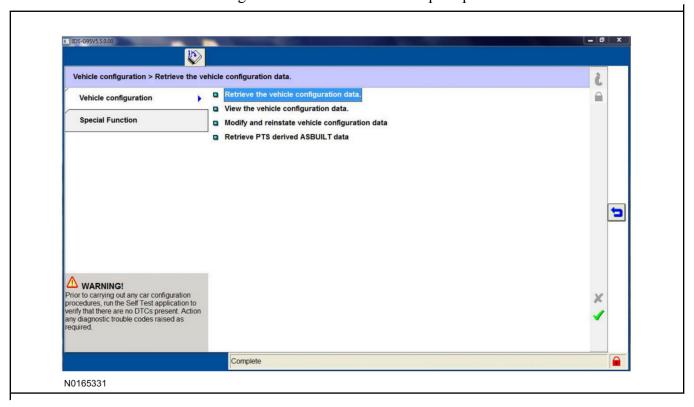
73. Select "Programmable Parameters" and select "Car Configuration Parameter(s)".



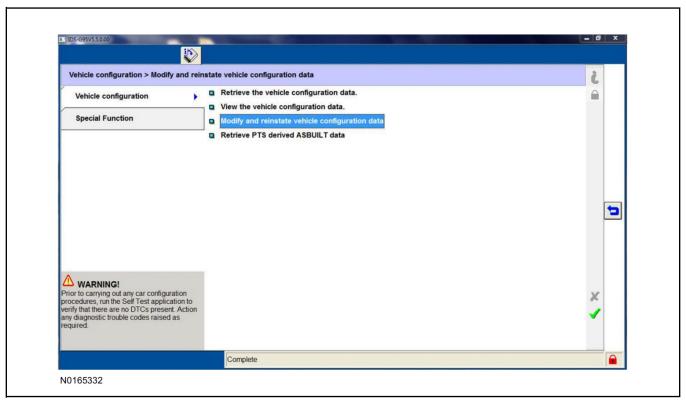
74. Select "Vehicle Configuration".



75. Select "Retrieve Vehicle Configuration data" and follow the prompts.



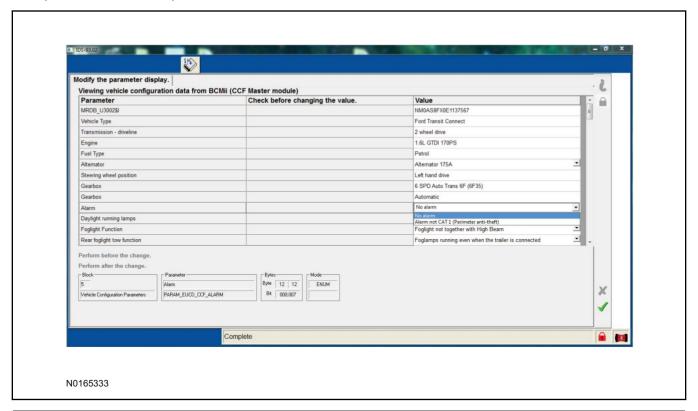
76. Select "Modify and reinstate vehicle configuration data".



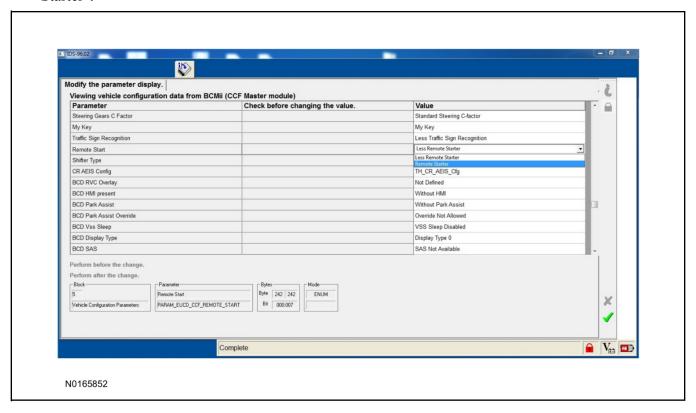
77. **NOTE:**

THIS FEATURE MUST BE ENABLED FOR PROPER REMOTE START OPERATION.

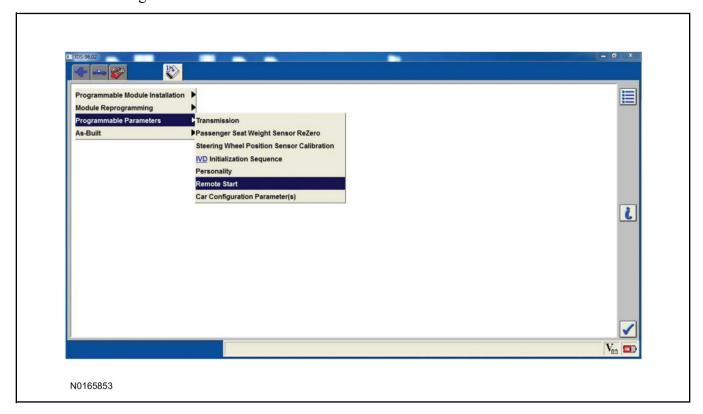
Identify the "Alarm" parameter and change the value from "No alarm" to "Alarm not CAT 1 (Perimeter anti-theft)".



78. Identify the "Remote Start" parameter and change the value from "Less Remote Starter" to "Remote Starter".



- 79. Select the Tick mark and download the data back into the vehicle.
- 80. Return to "Programmable Parameters" and then select "Remote Start".



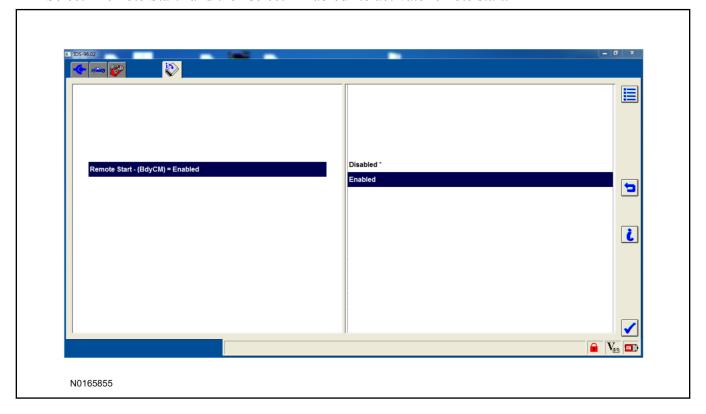
81. **NOTE:**

Enable all available equipment features during the remote start enable process.

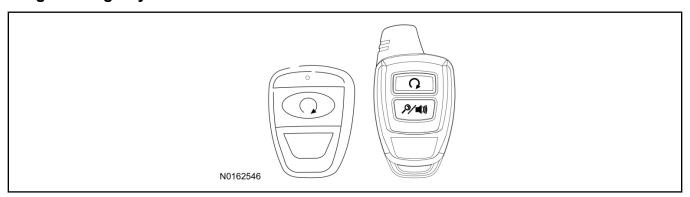
NOTE:

The remote start feature must be enabled in the body control module and the instrument cluster.

Select "Remote Start" and then select "Enabled" to activate remote start.



Programming Key Fobs



82. **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".

RMST Functional Test

NOTE:

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

- 83. Make sure the shift lever is in PARK and the ignition is in the OFF position. Remove all keys from the vehicle.
- 84. Close the hood.
- 85. Close all of the vehicle doors.
- 86. Start the vehicle by pressing the remote start button twice on the remote start key fob.
- 87. Confirm the remote start works with the vehicle in park and with the hood and doors closed.
- 88. Open the hood.
- 89. **NOTE:**

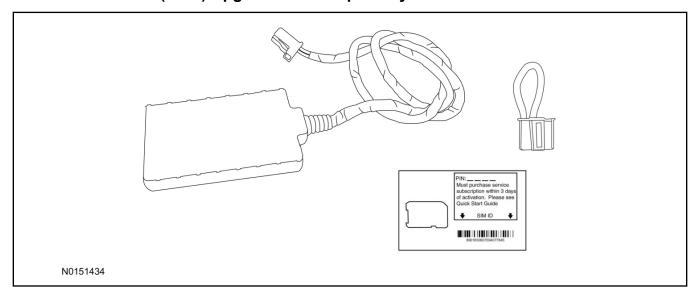
Vehicle doors should be closed while performing this step.

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.

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

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



91. 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
5	Tie Wraps

\triangle CAUTION:

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

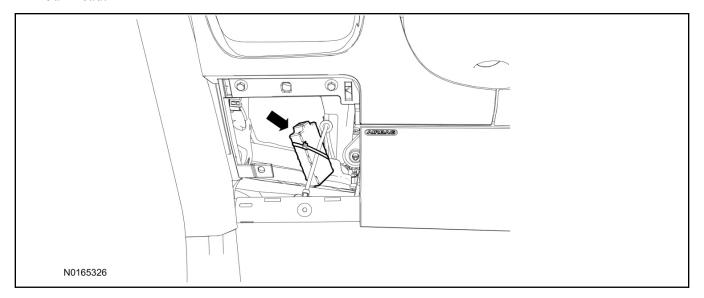
NOTE:

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

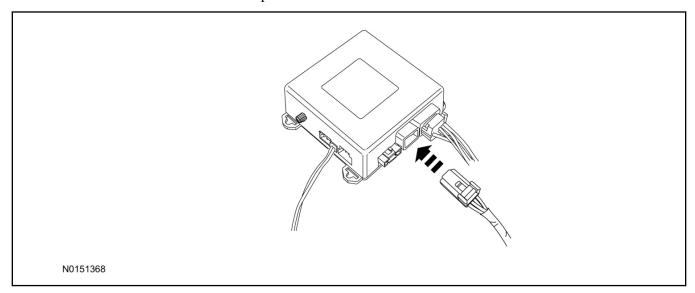
92. **NOTE:**

DLC access panel removed for clarity.

Using a tie-strap, secure the RMU to the hood latch release cable near the driver side of the vehicle bulkhead.

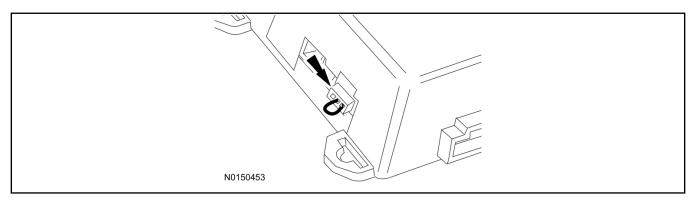


- 93. Connect the RMU electrical connector to the VSS module.
 - Secure the harness with tie-straps.



VSS Module - Optional Vehicle Security Features

- 94. 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 and Perimeter Alarm Activation - Key Start Vehicles (Without Factory Remote Start)

NOTE:

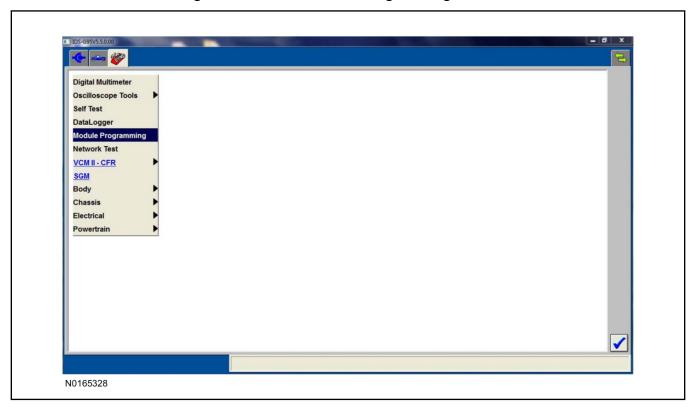
ALL STEPS WITHIN THIS ACTIVATION PROCEDURE MUST BE COMPLETED FOR PROPER SYSTEM OPERATION.

NOTE:

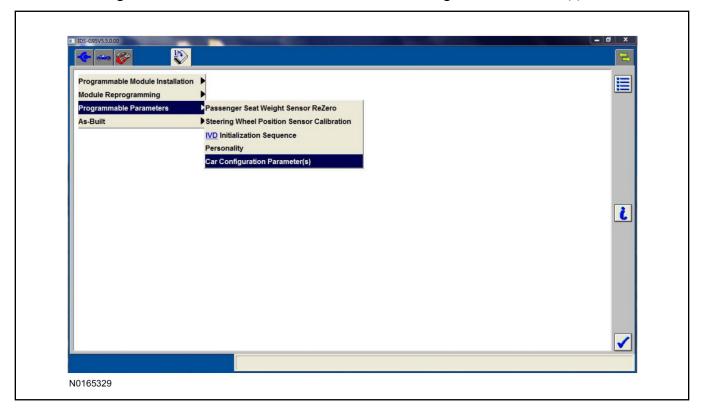
IDS must be connected to the internet during remote start and perimeter alarm activation.

- 95. Cycle ignition OFF, ON, OFF one time to learn RMST to the vehicle.
- 96. Verify that the IDS is updated to the most current version.
- 97. Connect IDS.
 - Follow the prompts to select new vehicle session.
 - Enter VIN.

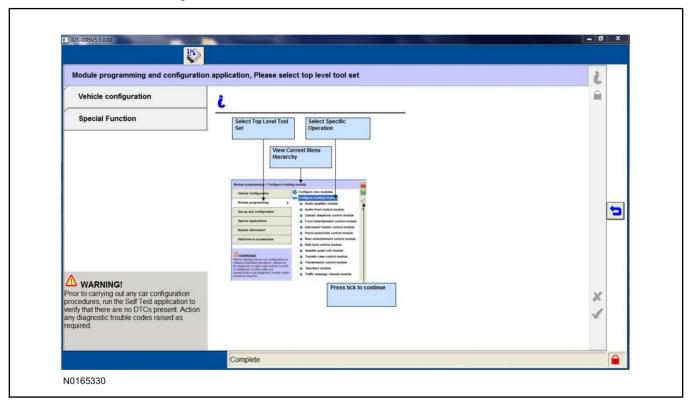
98. Start a new session using IDS and select "Module Programming".



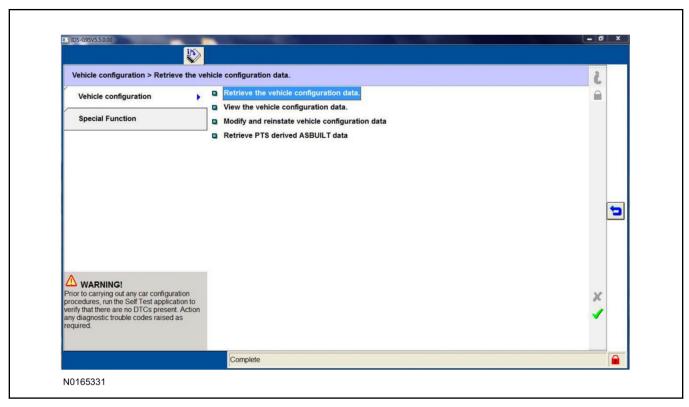
99. Select "Programmable Parameters" and then select "Car Configuration Parameter(s)".



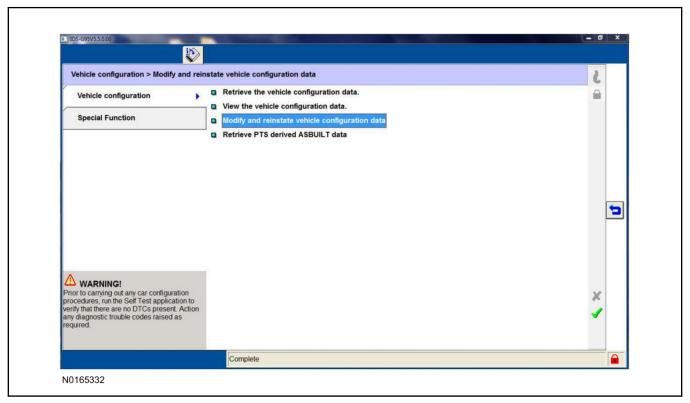
100. Select "Vehicle Configuration".



101. Select "Retrieve Vehicle Configuration data" and follow the prompts.



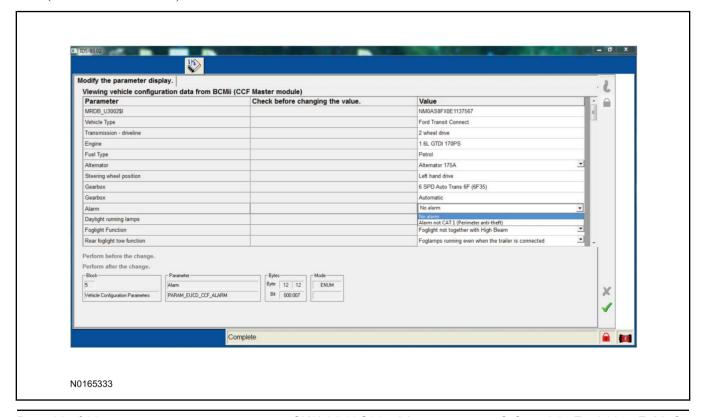
102. Select "Modify and reinstate vehicle configuration data".



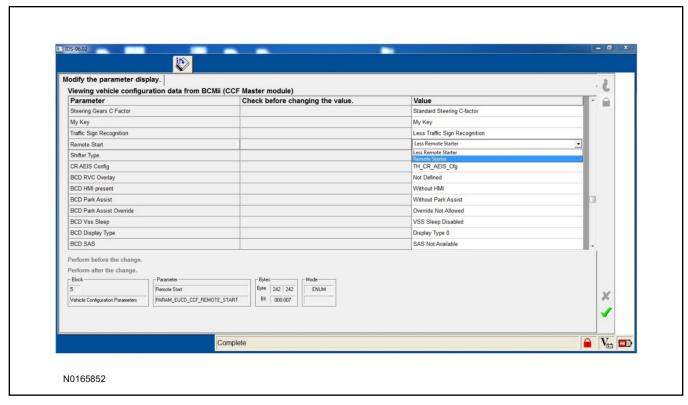
103.**NOTE**:

THIS FEATURE MUST BE ENABLED FOR PROPER REMOTE START OPERATION.

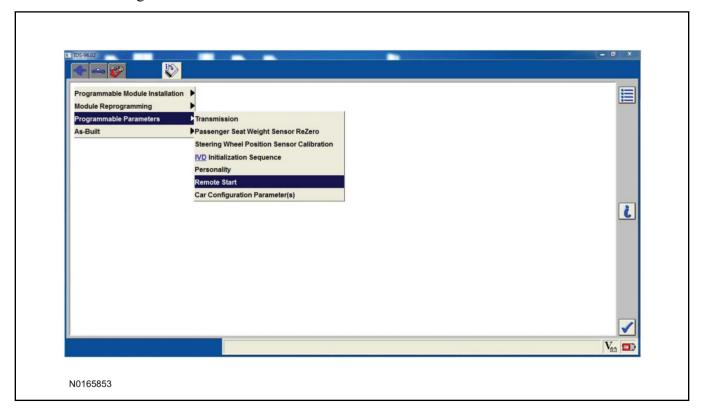
Identify the "Alarm" parameter and change the value from "No alarm" to "Alarm not CAT 1 (Perimeter anti-theft)".



104.Identify the "Remote Start" parameter and change the value from "Less Remote Starter" to "Remote Starter".



- 105. Select the Tick mark and download the data back into the vehicle.
- 106.Return to "Programmable Parameters" and then select "Remote Start".



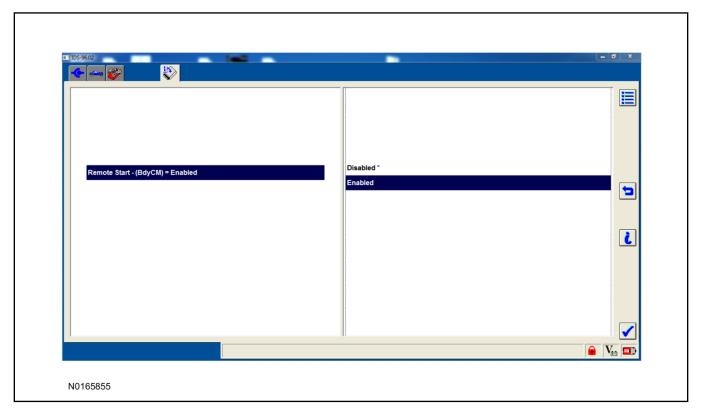
107.**NOTE**:

Enable all available equipment features during the remote start enable process.

NOTE:

The remote start feature must be enabled in the body control module and the instrument cluster.

Select "Remote Start" and then select "Enabled" to activate remote start.



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.

108. For RMU activation the following information from the customer is recommended to provide them with electronic notification for app retrieval:

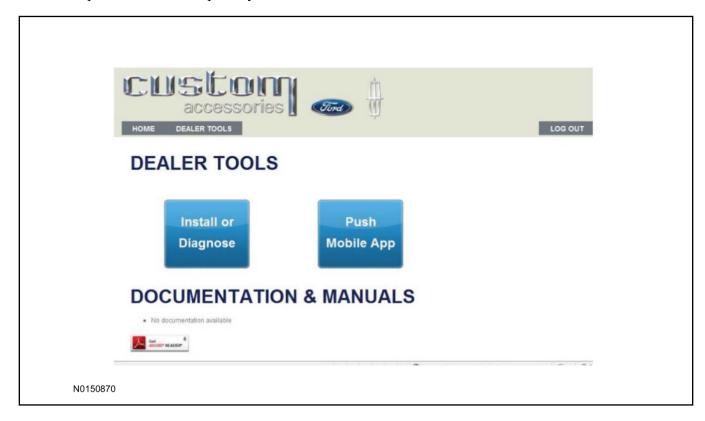
- 1 Email Address
- 2 Cell Phone Number
- 3 Cell Phone Carrier Company

109.Log on to your Professional Technician Society (PTS) account and enter the vehicle information.

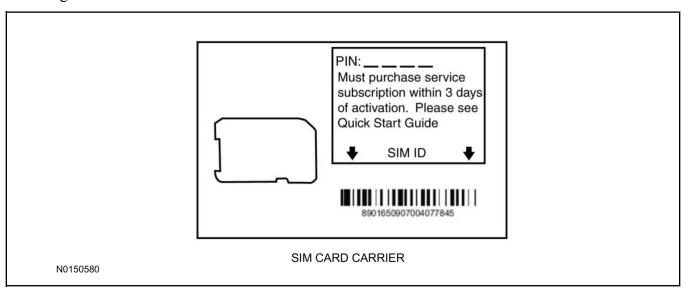
- 1 Select "Vehicle Id".
- 2 Select "By Year & Model"
- 3 Choose the year & model of the vehicle and then select "GO".
- 4 Hover over the "Workshop" tab.
- 5 Select the "Accessory Installation" menu item.
- 6 Under the "Electrical" heading, select the "Remote Access Activation" link (first time users will need to agree to terms & conditions).
- 7 Select the "Install or Diagnose" link.

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.



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



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

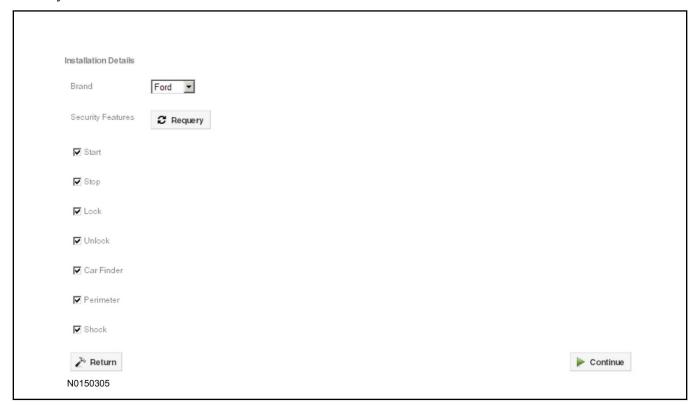


NOTE:

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.



- 112.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)



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 VSS to Vehicle" section in this manual.

All Vehicles

- 113.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.
- 114.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.