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TRAILER TOW

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Trailer Tow

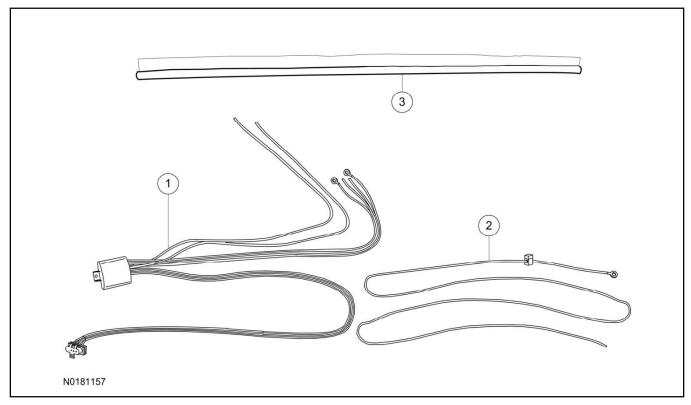
GENERAL PROCEDURES

Proper Splicing Techniques

Trailer Tow Wire Harness - Protective Heat Sleeve Installation

INSTALLATION

Trailer Tow



Bronco

1. Verify correct kit number.

Review Trailer Tow Installation Kit Contents

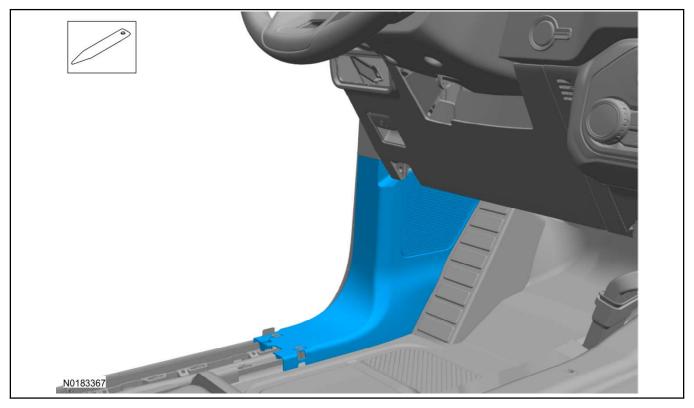
2. Review Trailer Tow Installation Kit Contents.

Trailer Tow Installation Kit

ITEM	QUANTITY	DESCRIPTION
1	1	Trailer Tow Converter Harness Assembly
2	1	Power Cable with In-Line Fuse
_	7	Foam Pad (Not Shown)
_	14	Tie Straps (Not Shown)
_	60"	Convoluted Tubing (Not Shown)
_	6	Hitch Wire Retainer Tie Straps (Not Shown)
_	1	Fuse - 15A (Not Shown)
3	1	- 14N302- Protective Heat Sleeve

Vehicle Preparation

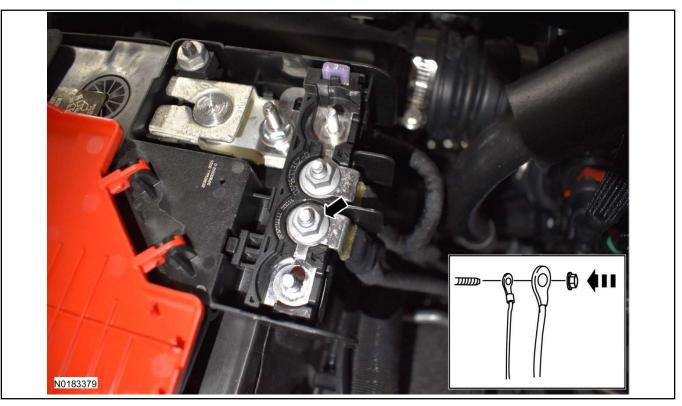
- 3. Disconnect the battery cable to ground. For additional information, refer to Workshop Manual (WSM) Section 414-01.
- 4. Remove the LH lower B-pillar trim panel. For additional information, refer to WSM Section 501-05.
- 5. Remove the LH lower cowl trim panel.



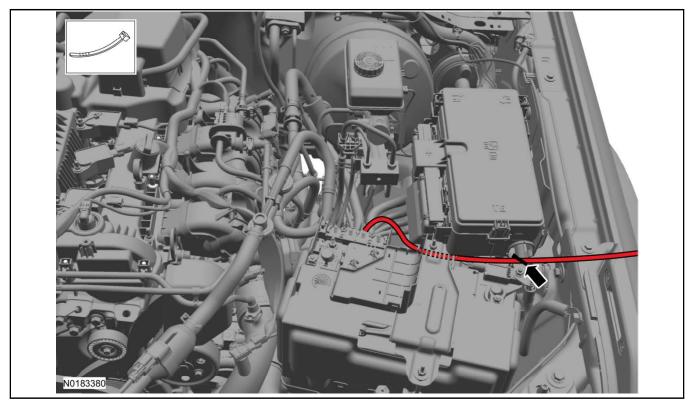
- 6. Remove the RH and LH loadspace trim panels. For additional information, refer to WSM Section 501-05.
- 7. Remove the LH rear tail lamp assembly. For additional information, refer to WSM Section 417-01.

Route Power Wire

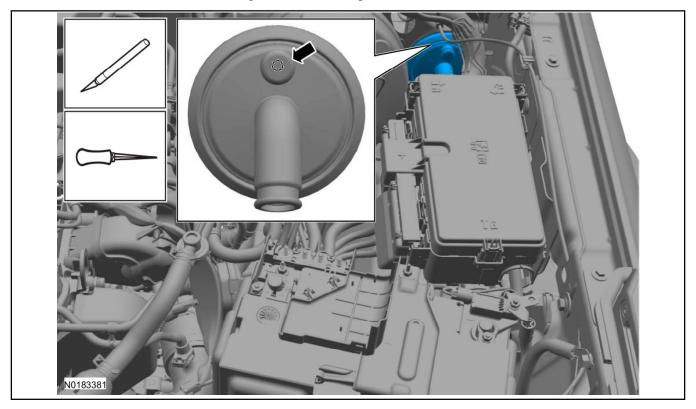
- 8. Connect the Red inline fused jumper harness power eyelet to the high current fuse box bus bar.
 - 1 Remove the nut from the bus bar located near the battery.
 - 2 Install the power wire onto the bus bar stud.
 - 3 Install bus bar nut.
 - Tighten to 9 Nm (80 lb-in). IMPORTANT: For proper operation, the nut securing the inline fused jumper eyelet to the bus bar must be torqued to 9 Nm (80 lb.in).



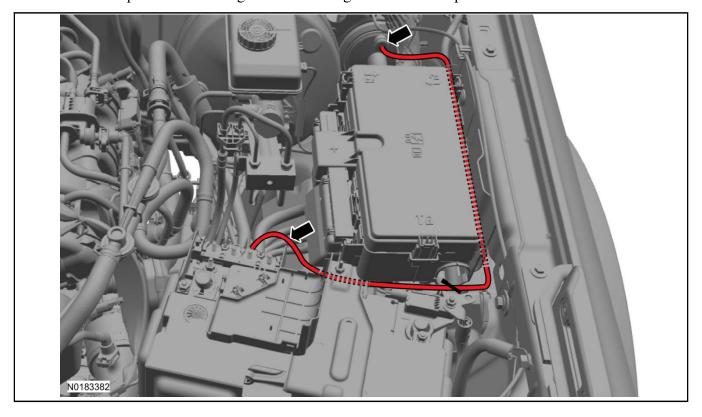
- 9. Install the convolute tubing to the red power cable between fuse holder and bulk head grommet, and from the eyelet to the fuse holder.
- 10. Secure the red power wire onto the wire harness using a tie strap.



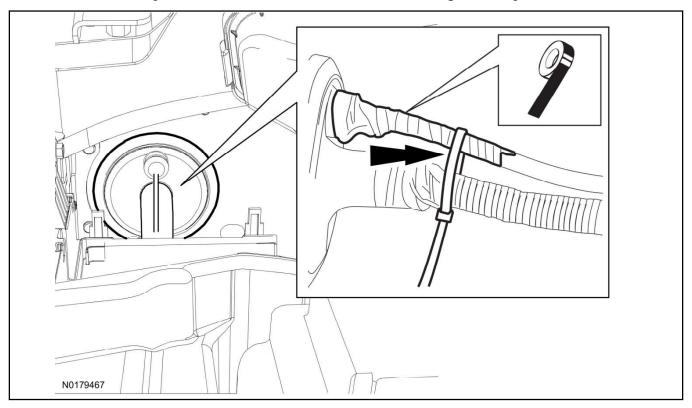
- 11. Locate the bulkhead grommet service port of the rubber grommet on the LH side of the engine compartment next to the brake booster.
 - Make a slice in the bulkhead grommet service port.



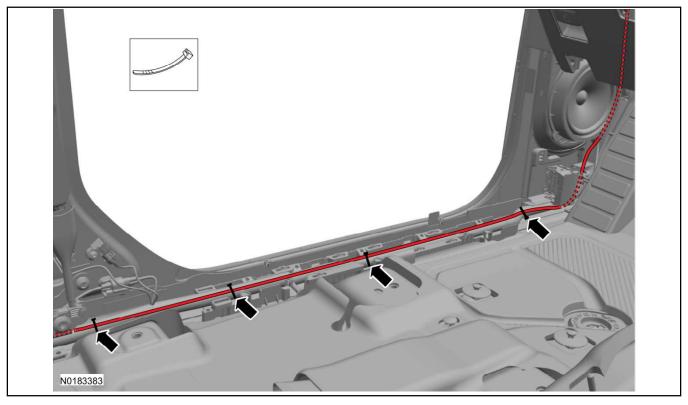
12. Feed the red power wire through the bulkhead grommet service port.



- 13. Seal the rubber grommet around the red power wire using Motorcraft® TA-29 Silicone Sealant or equivalent.
 - Apply electrical tape over the bulkhead grommet service pot and the red power wire.
 - Secure the red power wire to the main bulkhead harness using a tie strap.



- 14. From under the instrument panel, route the red power wire downward and along the existing wiring harness towards the rear of the vehicle.
 - Secure the red power wire to the wire harness using tie straps.

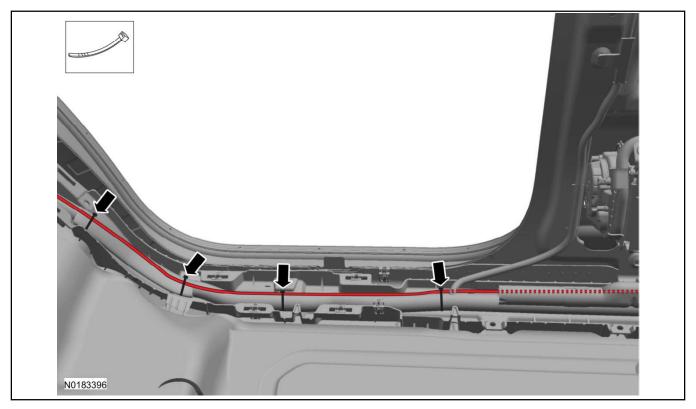


15. **NOTE:**

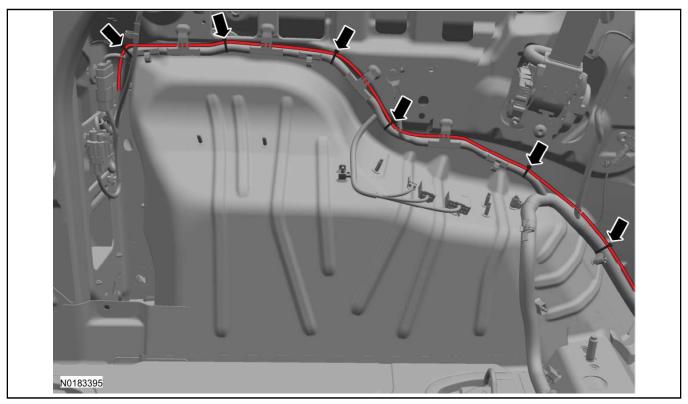
5 Door Shown.

Route the red power wire under the B-pillar pretensioner and continue to follow the main wire harness towards the rear of the vehicle.

• Secure the red power wire to the wire harness using tie straps.



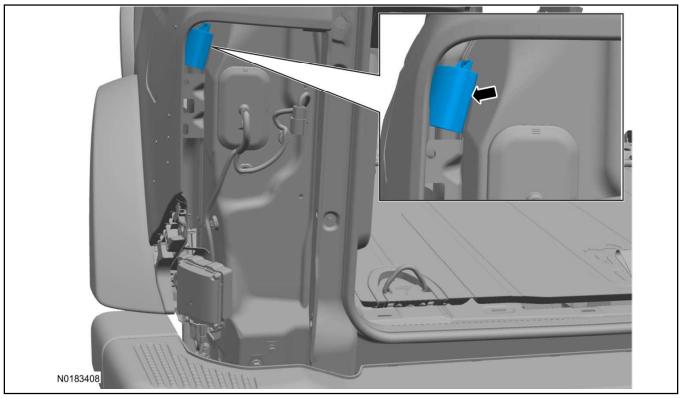
- 16. Route the red power wire upward along the rear body harness.
 - Secure the red power wire to the LH rear quarter panel vehicle harness using tie straps.



17. Connect the battery cable to ground. For additional information, refer to WSM Section 414-01.

Install the Trailer Tow Converter Harness Assembly

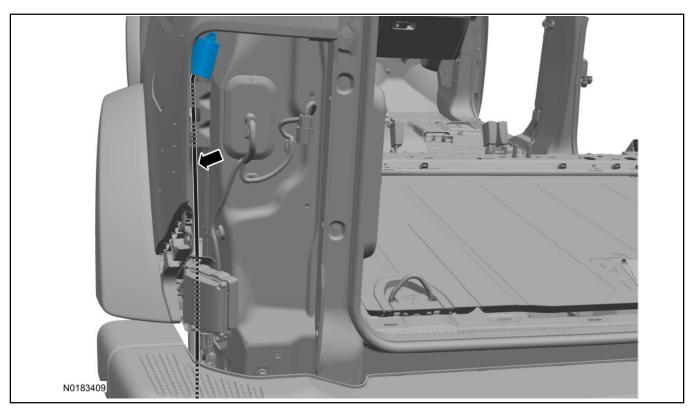
- 18. Install the trailer tow converter module in the LH rear tail lamp area with the orientation shown in the image.
 - Remove the protective cover on the 2 sided tape and install the trailer tow converter module on the body.



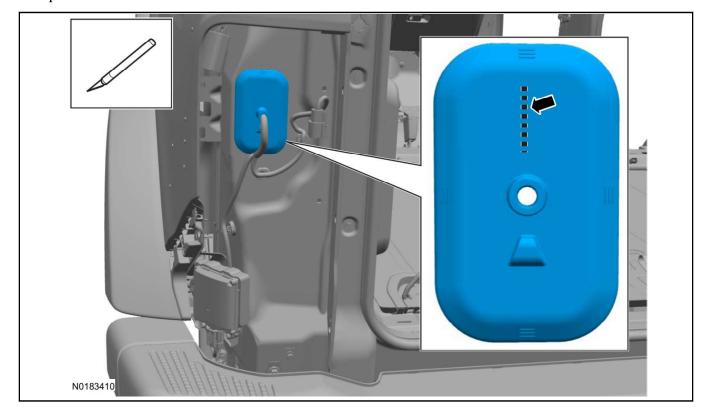
NOTE:

Ensure none of the wires are installed in front of the BLIS sensors located near the bottom of the rear tail lamps.

19. Route the 4 pin trailer tow flat wire downwards, behind the rear proximity sensor and behind the bumper.



20. Locate the LH rear tail lamp grommet, then make a slice through the grommet as shown in the picture below.



- 21. Identify the type of the rear tail lamp.
 - 1 Halogen rear tail lamp.
 - 2 LED rear tail lamp.



- 22. Route the Black (Ground), Green and Red power wire from the trailer tow converter module through the slice made in the LH rear tail lamp grommet towards the inside of the vehicle.
 - If the vehicle is equipped with halogen rear tail lamps, route the Blue wire from the trailer tow converter module through the LH rear tail lamp grommet.



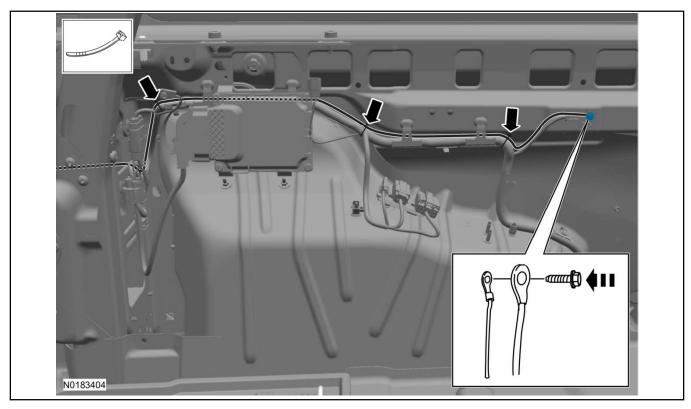
23. Seal the LH rear tail lamp grommet around wiring using Motorcraft® TA-29 Silicone Sealant or equivalent.

Circuit Wires for Connection

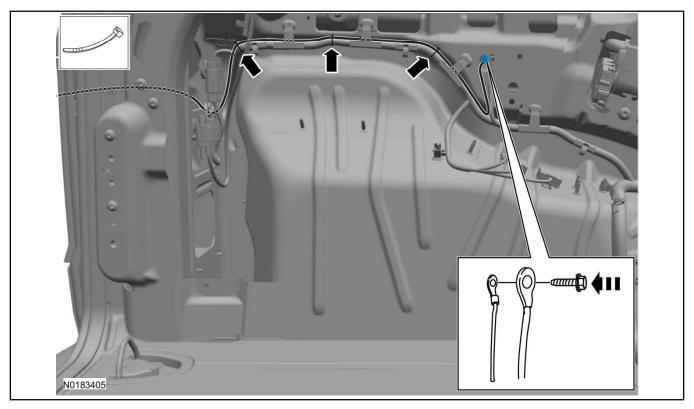
NOTE:

Refer to "Proper Wire Splicing Techniques" prior to proceeding.

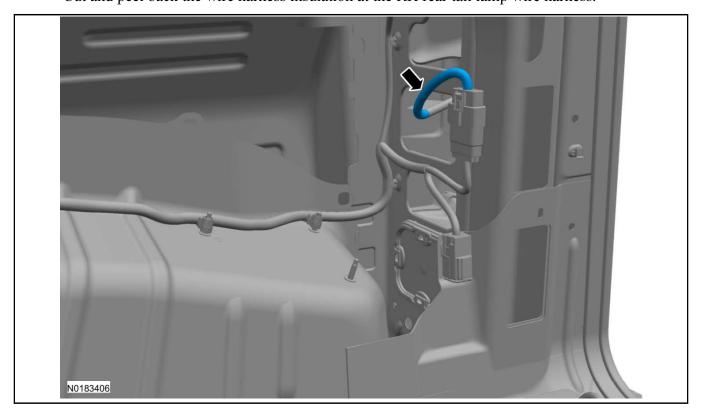
- 24. For 3 door Connect the Black "Ground" wire from the trailer tow converter module to the ground stud located on the LH quarter panel.
 - For Halogen route the Blue wire from the trailer tow converter module to the same ground stud located on the LH quarter panel.
 - Secure the wires to the wire harness using tie straps.



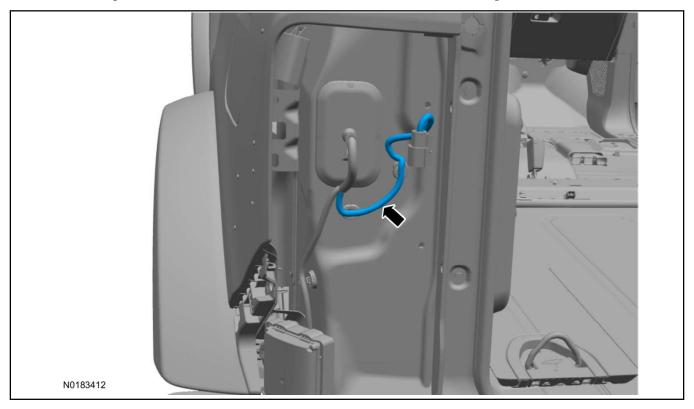
- 25. For 5 door Connect the Black "Ground" wire from the trailer tow converter module to the ground stud located on the LH quarter panel.
 - For Halogen route the Blue wire from the trailer tow converter module to the same ground stud located on the LH quarter panel.
 - Secure the wires to the wire harness using tie straps.



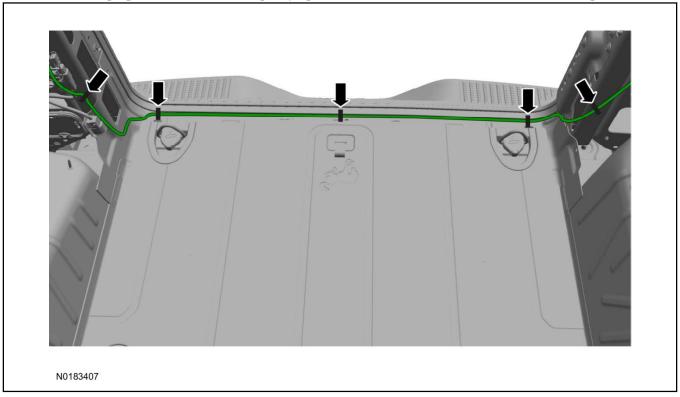
- 26. Locate the RH rear tail lamp wire harness, where the control module harness connections will be made.
 - Cut and peel back the wire harness insulation at the RH rear tail lamp wire harness.



- 27. Locate the LH rear tail lamp wire harness, where the control module harness connections will be made.
 - Cut and peel back the wire harness insulation at the LH rear tail lamp wire harness.



- 28. Route the Green wire from the control module along the rear floor pan and up to the RH side rear tail lamp wire harness.
 - Install tape pads at 5 locations equally spaced to secure the wire to the vehicle floor pan.



- 29. Identify the White/Green (Halogen) or Gray/Orange (LED) LH turn circuit wire within the LH rear tail lamp wire harness.
 - A DVOM connected to the correct wire will show 0V, then show pulsing 12V with the
 Multifunction Switch in the LEFT TURN position.
 A logic probe will show ground on the correct wire, then show pulsing power with the
 Multifunction Switch in the LEFT TURN position.
- 30. Connect the Yellow LH turn signal wire from the control module harness to the White/Green (Halogen) or Gray/Orange (LED) LH turn circuit wire within the LH rear tail lamp wire harness.
- 31. Identify the Blue/Gray tail lamp circuit wire within the LH rear wire harness.
 - A DVOM connected to the correct wire will show 0V with the Headlight Switch in the OFF position and 12V with the Headlight Switch in the parking lights ON position.
 A logic probe connected to the correct wire will show ground with the Headlight Switch in the OFF position and power with the Headlight Switch in the parking lights ON position.
- 32. Connect the Brown tail lamp wire from the control module harness to the Blue/Gray tail lamp circuit wire within the LH rear wire harness.
- 33. Identify the Gray/Violet (Halogen) or Green/Orange (LED) RH turn circuit wire within the RH rear tail lamp wire harness.
 - A DVOM connected to the correct wire will show 0V, then show pulsing 12V with the Multifunction Switch in the RIGHT TURN position.
 A logic probe will show ground on the correct wire, then show pulsing power with the Multifunction Switch in the RIGHT TURN position.

- 34. Connect the Green RH turn signal wire from the control module harness to the Gray/ Violet (Halogen) or Green/Orange (LED) RH turn circuit wire within the RH rear tail lamp wire harness.
- 35. Identify the Blue/Green (LED) stop lamp circuit wire within the LH rear wire harness.
 - A DVOM connected to the correct wire will show 0V with the Brake Pedal RELEASED and 12V with the Brake Pedal ENGAGED.
 - A logic probe connected to the correct wire will show ground with the Brake Pedal RELEASED and power with the Brake Pedal ENGAGED.
- 36. Connect the Blue stop lamp wire from the control module harness to the Blue/Green stop lamp circuit wire within the LH rear wire harness.

NOTE:

If equipped, remove the eyelet from the Blue wire from the control module harness.

NOTE:

For Halogen - The Blue wire is routed through the LH rear tail lamp grommet and connected to the ground stud located above the wheel well.

37. Splice the red (battery) wire from the control module harness to the red power cable that was routed from the front of the vehicle.

4 Flat Ribbon Trailer Wire Harness - Protective Heat Sleeve Installation

NOTICE:

The protective heat sleeve should be installed onto the 4 flat ribbon trailer wire harness in areas where high temperatures could occur, such as exhaust pipes, mufflers etc. Failure to properly shield the trailer tow wiring harness in areas where high temperatures occur could result in harness failure. The installation process can be found in the steps below.

- 38. Position the protective heat sleeve onto the 4 flat ribbon trailer wire harness in area that requires heat protection.
 - Cut to length as needed.



39. Remove adhesive strip backing and secure the protective heat sleeve around the 4 flat ribbon trailer wire harness.



Secure Wires

NOTICE:

Secure harness away from sharp edges, moveable parts or high heat sources.

- 40. Install the 4-pin connector to the front of the trailer hitch. Secure the 4-pin ribbon harness to the hitch and vehicle harness.
- 41. Bundle all excess wires together and use the supplied tie straps to secure.
- 42. Install the in-line fuse into the red power cable fuse socket, under the hood near the battery.

NOTE:

If your vehicle is equipped with Reverse Park Aid, Blind Spot Information System, Cross Traffic Alert or other detection system a false alert maybe generated when towing a trailer.

NOTE:

The Class 1 4-pin trailer tow harness does not support electric trailer brakes.

- 43. Verify proper operation of the vehicle lighting systems and 4-pin trailer tow connector.
 - (Halogen) Gray/Violet or (LED) Green/Orange- Module/Green RH Turn Signal
 - (Halogen) White/Green or (LED) Gray/Orange Module/Yellow LH Turn Signal
 - Blue/Gray Module/Brown Tail Lamps
 - Black Ground Eyelet
 - (LED) Blue/Green or (Halogen) Ground bolt about LH wheel well Module/Blue Brake

Reassemble Vehicle

44. Reverse the removal procedure to reassemble the vehicle.