



David J. Johnson  
Director  
Service Engineering Operations  
Ford Customer Service Division

Ford Motor Company  
P. O. Box 1904  
Dearborn, Michigan 48121

August 25, 2022

**TO:** All U.S. Ford and Lincoln Dealers

**SUBJECT:** **Customer Satisfaction Program 21M05 - Supplement # 2**  
Certain 2017-2022 Model Year Super Duty Vehicles Equipped with a Power Release Tailgate - Unintended Tailgate Opening

**REF :** **Customer Satisfaction Program 21M05 - Supplement # 1**  
Dated July 22, 2022

**New! REASON FOR THIS SUPPLEMENT**

*Technical Information: Updated with revised instructions to account for wire color differences across multiple model year vehicles.*

**PROGRAM TERMS**

This program provides a no-cost repair (if needed) to the power release tailgate feature for 10 years of service or 150,000 miles from the warranty start date of the vehicle, whichever occurs first.

This program may be used multiple times as long as the vehicle is within time and mileage limits of the program. Once the program has expired, Service Part Warranty (SPW) and Extended Service Plan (ESP) may be eligible.

If a vehicle has already exceeded either the time or mileage limits, this no-cost repair will last through January 31, 2023.

Coverage is automatically transferred to subsequent owners.

**VEHICLES COVERED BY THIS PROGRAM**

Vehicle	Model Year	Assembly Plant	Build Dates
Super Duty	2017-2022	Kentucky Truck	October 8, 2015 through December 20, 2021

Affected vehicles are identified in OASIS.

**REASON FOR PROVIDING A NO-COST REPAIR**

In the affected vehicles, some customers report experiencing an unintended tailgate opening and may have previously serviced their vehicle for this concern. Ford has developed an enhanced remedy for customers who may want this enhanced repair performed on their vehicle.

**SERVICE ACTION**

Some vehicles covered by Field Service Action (FSA) 21M05 may have FSA 19S48 currently open. Please check OASIS to verify coverage and perform FSA 19S48 ONLY if coverage applies. DO NOT perform FSA 19S48 on vehicles that are not included in that program.

If a vehicle included in FSA 21M05 has sustained damage to the tailgate due to an unintended tailgate opening, please refer to the claiming instructions for related damage.

**Service Action Continued On The Next Page**

## **SERVICE ACTION (continued)**

- **2017-2019 Vehicles:** If an affected vehicle owner has reported an unintended tailgate opening, dealers are to modify the power release tailgate system wiring, install a new tailgate handle release switch and reprogram the Body Control Module (BCM) software using Integrated Diagnostic Software (IDS) release 126.05 or higher.

**NOTE: Safety Recall 19S48 must be completed prior to performing the 21M05 service procedure.**

**NOTE:** FDRS cannot be used for programming on the 2017-2019 Super Duty vehicles.

- **2020-2022 Vehicles:** If an affected vehicle owner has reported an unintended tailgate opening, dealers are to modify the power release tailgate system wiring, install a new tailgate handle release switch and reprogram the BCM software using Ford Diagnosis and Repair System (FDRS).

**NOTE:** IDS cannot be used for programming on the 2020-2022 Super Duty vehicles.

**Customer Information Sheet and Owner's Manual Addendum:** At the completion of this repair, dealership service management is to provide a copy of the "Customer Information Sheet" and "Owner's Manual Addendum" that is posted with this bulletin to the vehicle owner.

This service must be performed on all affected vehicles at no charge to the vehicle owner.

**NOTE:** The tailgate is required to perform the repair but does not need to be installed on the vehicle.

**NOTE:** Parts are currently not available in sufficient quantities to repair all vehicles. Part orders can be requested through the Special Service Support Center (SSSC) using the SSSC link at the bottom of the OASIS VIN report screen to repair vehicles. The SSSC will **only** accept orders if:

- The vehicle is currently at the dealership and the customer has reported experiencing an unintended tailgate opening.
- The dealer has an open Repair Order (RO) on the Vehicle Identification Number (VIN) with an unintended tailgate opening concern.

## **OWNER NOTIFICATION MAILING SCHEDULE**

Owners of affected vehicles have been notified. Dealers should repair any affected vehicles that experience unintended tailgate opening, whether or not the customer has received a letter.

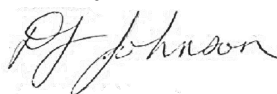
## **ATTACHMENTS**

Attachment I: Administrative Information  
Attachment II: Labor Allowances and Parts Ordering Information  
**Attachment III: Technical Information**  
Customer Information Sheet  
Owner's Manual Addendum  
Owner Notification Letter

## **QUESTIONS & ASSISTANCE**

For questions and assistance, contact the Special Service Support Center (SSSC) via the SSSC Web Contact Site. The SSSC Web Contact Site can be accessed through the Professional Technician System (PTS) website using the SSSC link listed at the bottom of the OASIS VIN report screen or listed under the SSSC tab.

Sincerely,



David J. Johnson

**Customer Satisfaction Program 21M05 - *Supplement # 2***  
Certain 2017-2022 Model Year Super Duty Vehicles Equipped with a Power Release Tailgate  
Unintended Tailgate Opening

**OASIS ACTIVATION**

OASIS was activated on May 20, 2022.

**FSA VIN LISTS ACTIVATION**

FSA VIN Lists will not be activated for this service action.

**SOLD VEHICLES**

- Only owners with affected vehicles that exhibit the covered condition will be directed to dealers for repairs.
- Dealers are to prioritize repairs of customer vehicles over repairs of new and used vehicle inventory.

**STOCK VEHICLES**

Do not perform this program unless the affected vehicle exhibits the covered condition.

**TITLE BRANDED / SALVAGED VEHICLES**

Vehicles with cancelled warranties are not eligible for this service action.

**OWNER REFUNDS**

- Ford Motor Company is offering a refund for owner-paid repairs covered by this program if the repair was performed before the date of the Owner Notification Letter. This refund offer expires **January 31, 2023**.
- Dealers are also pre-approved to refund owner-paid emergency repairs that were performed away from an authorized servicing dealer after the date of the Owner Notification Letter. Non-covered repairs, or those judged by Ford to be excessive, will not be reimbursed.
- Refunds will only be provided for the cost associated with repairs associated with unintended tailgate opening.

**RENTAL VEHICLES**

The use of rental vehicles is not approved for this program.

**RELATED DAMAGE PHOTO SUBMISSION**

Ford requires photos for any related damage claims associated with this program.

Please submit an Approval Request to the SSSC Web Contact Site containing clear photos of the VIN and all related damage, including the component(s) that contacted the vehicle, for approval consideration.

**ADDITIONAL REPAIR (LABOR TIME AND/OR PARTS)**

Additional repairs identified as necessary to complete the FSA should be managed as follows:

- For related damage and access time requirements, refer to the Warranty and Policy Manual – Section 6 – Ford & Lincoln Program Policies / General Information & Special Circumstances for FSA's / Related Damage.
- For vehicles within new vehicle bumper-to-bumper warranty coverage, SSSC approval is still required.
- For vehicles outside new vehicle bumper-to-bumper warranty coverage, submit an Approval Request to the SSSC Web Contact Site prior to completing the repair.

**Customer Satisfaction Program 21M05 - Supplement # 2**  
 Certain 2017-2022 Model Year Super Duty Vehicles Equipped with a Power Release Tailgate  
 Unintended Tailgate Opening

**CLAIMS PREPARATION AND SUBMISSION**

- **Note:** All repairs for this program should be claimed using the claim entry direction below regardless if the vehicle is still under the New Vehicle Limited Warranty.
  - Service Part Warranty (SPW) and/or Ford/Lincoln Loyalty Plans (ESP) eligible vehicles – Claim repairs to FSA 21M05 if vehicle is still within time and mileage limits.
- **Claim Entry:** Enter claims using Dealer Management System (DMS) or One Warranty Solution (OWS) online.
  - When entering claims:
    - Claim type 31: Field Service Action. The FSA number (21M05) is the sub code.
    - Customer Concern Code (CCC): L07 – Ext. Door Lock Controls-Power
    - Condition Code (CC): 42 – Does Not Operate Properly
    - Causal Part Number: 9C888 – Tailgate Switch
    - Part Quantity: 0
  - For additional claims preparation and submission information, refer to the Recall and Customer Satisfaction Program (CSP) Repairs in the OWS User Guide.
- **Related Damage/Additional labor and/or parts:** Must be claimed as Related Damage on a separate repair line from the FSA with same claim type and sub code as described in Claim Entry above.  
**IMPORTANT:** Click the Related Damage Indicator radio button.
- **Refunds:** Submit refunds on a separate repair line.
  - Program Code: 21M05                      - Misc. Expense: ADMIN
  - Misc. Expense: REFUND                      - Misc. Expense: 0.2 Hrs.
  - Multiple refunds should be submitted on one repair line and the invoice details for each repair should be detailed in the comments section of the claim.
- **Provision for Locally Obtained Supplies:** Includes Coroplast 837 electrical wire harness tape or equivalent, black electrical tape (as needed), orange electrical tape (as needed), TA-32 (as needed) and rosin core solder. This provision is for the amount supplies used for one vehicle repair. Submit on the same repair line on which the FSA is claimed.  
**NOTE:** The locally obtained supplies can be used on multiple vehicles.
  - Program Code: **21M05**
  - Misc. Expense: OTHER
  - Misc. Expense: Claim up to \$3.00
- **Provision for Sublet Windshield Removal/Installation:** This expense cannot be claimed if the dealership removes and installs the windshield. Sublet documentation must be retained. Submit on the same line as the repair.
  - Program Code: 21M05                      - Misc. Expense: FSAOSL
  - Misc. Expense: Claim up to \$250.00



**Customer Satisfaction Program 21M05 - Supplement # 2**

Certain 2017-2022 Model Year Super Duty Vehicles Equipped with a Power Release Tailgate  
Unintended Tailgate Opening

**LABOR ALLOWANCES**

Description	Vehicles	Labor Operation	Labor Time
<p><b>NOTE: Safety Recall 19S48 must be completed prior to performing the 21M05 service procedure.</b></p> <p>Inspect BCM, Install Tailgate Actuator Ground Wiring Kit, Replace Tailgate Handle Release Switch, Update BCM Software Using IDS Release 126.05 or Higher, Enable the Tailgate Switches Double Press and Disable Tailgate Ajar Message (if equipped) Via the IDS Programmable Parameters and Print <u>Both</u> the Customer Information Sheet and the Owner's Manual Addendum.*</p> <p><b>NOTE:</b> The tailgate is required to perform the repair but does not need to be installed on the vehicle.</p> <ul style="list-style-type: none"> <li>- Camera alignment is not required</li> <li>- FDRS cannot be used on the affected vehicles</li> <li>- This labor operation cannot be claimed with 21M05C</li> </ul>	2017-2019 Super Duty	21M05B	3.8 Hours
<p><b>NOTE: DO NOT perform FSA 19S48 on vehicles that are not included in that program.</b></p> <p>Inspect BCM, Install Tailgate Actuator Ground Wiring Kit, Replace Tailgate Handle Release Switch, Update BCM Software Using the Ford Diagnosis and Repair System (FDRS), Enable the Tailgate Switches Double Press and Disable Tailgate Ajar Message Via the FDRS Programmable Parameters and Print <u>Both</u> the Customer Information Sheet and the Owner's Manual Addendum.*</p> <p><b>NOTE:</b> The tailgate is required to perform the repair but does not need to be installed on the vehicle.</p> <ul style="list-style-type: none"> <li>- Camera alignment is not required</li> <li>- IDS cannot be used on the affected vehicles</li> <li>- This labor operation cannot be claimed with 21M05B</li> </ul>	2020-2022 Super Duty	21M05C	3.6 Hours
<p><b>NOTE: This labor operation is to be claimed ONLY if the BCM connector(s) or fuse(s) exhibit signs of moisture and/or corrosion contamination. Photo(s) of BCM contamination MUST be submitted to the SSSC prior to diagnostics in order to use this labor operation.</b></p> <p>Diagnose and Repair the Source(s) of the BCM Moisture and/or Corrosion Contamination.**</p> <ul style="list-style-type: none"> <li>- This labor operation can be claimed in combination with 21M05B or 21M05C</li> </ul>	All Vehicles	MT21M05D	Actual time up to 10.0 Hours***
Time Allowed to Submit Photo(s) for Related Damage Claims or for BCM Contamination (As Needed)		21M05ZZ	0.2 Hours

**Labor Allowances Continued On The Next Page**

**Customer Satisfaction Program 21M05 - Supplement # 2**  
 Certain 2017-2022 Model Year Super Duty Vehicles Equipped with a Power Release Tailgate  
 Unintended Tailgate Opening

**LABOR ALLOWANCES (continued)**

\* **Customer Information Sheet and Owner's Manual Addendum:** At the completion of this repair, dealership service management is to provide a copy of both the "Customer Information Sheet" and the "Owner's Manual Addendum" that are posted with this bulletin to the vehicle owner.

\*\* Less than 3% of the affected vehicle population is expected to require water leak diagnostics.

\*\*\* Dealers are authorized to claim up to 10.0 hours actual time after contacting the SSSC Web Contact Site and submitting photo(s) for approval. Follow the Actual Time Usage Guidelines and Service Management Responsibilities as identified in the Warranty and Policy Manual. Claims for additional parts and/or labor over 10.0 hours should be submitted to the SSSC as a Related Damage contact. If contacting SSSC, please provide the complete tech details and time stamps to support the request for the additional time.

**PARTS REQUIREMENTS / ORDERING INFORMATION**

**SSSC Web Contact Site:**

To place an order for Tailgate Actuator Ground Wiring Kit, submit a VIN-specific Part Order contact via the SSSC Web Contact Site.

Part Number	Description	Order Quantity	Claim Quantity
KC3Z-14A411-D	Tailgate Actuator Ground Wiring Kit	1	1

**NOTE:** The Tailgate Actuator Ground Wiring kits are currently not available in sufficient quantities to repair all vehicles. Due to limited part supply, it is possible not all parts requests can be filled. The part orders will be placed by the SSSC in the order received. The Tailgate Actuator Ground Wiring kit part orders can be requested through the SSSC using the SSSC link at the bottom of the OASIS VIN report screen to repair vehicles. **The SSSC will only accept orders if:**

- The vehicle is currently at the dealership and the customer report experiencing an unintended tailgate opening.
- The dealer has an open RO on the VIN with an unintended tailgate opening concern.

It is anticipated that parts will be available in sufficient quantities to repair all vehicles by the end of third quarter 2022.

Dealers will be notified via a DOES II communication if circumstances warrant a change in part supply strategy and when open ordering resumes.

**Order the parts below through normal order processing channels:**

Part Number	Description	Order Quantity	Claim Quantity
GB5Z-9C888-B	Tailgate Handle Release Switch	1	1

**Parts Requirements / Ordering Information Continued On The Next Page**

**Customer Satisfaction Program 21M05 - Supplement # 2**

Certain 2017-2022 Model Year Super Duty Vehicles Equipped with a Power Release Tailgate  
Unintended Tailgate Opening

**PARTS REQUIREMENTS / ORDERING INFORMATION (continued)**

**Order the parts below through normal order processing channels:**

Part Number	Description	Order Quantity	Claim Quantity
TA-32	Motorcraft® TA-32 Clear Silicone Rubber* (As Needed)	Claim as Misc. OTHER	
Obtain Locally	Electrical Wire Harness Tape* Coroplast 837 or Equivalent - Can be obtained from Rotunda (NAI837X) or Narin		
	Rosin Core Solder*		
	Black Electrical Tape* (As Needed)		
	Orange Electrical Tape* (As Needed) - For vehicles equipped with 110 volts Inverter System		

\* The listed tapes and chemicals can be used on multiple vehicles.

To guarantee the shortest delivery time, an emergency order for parts must be placed.

**DEALER PRICE**

For latest prices, refer to DOES II.

**PARTS RETENTION, RETURN, & SCRAPPING**

Follow the provisions of the Warranty and Policy Manual, Section 1 - WARRANTY PARTS RETENTION AND RETURN POLICIES. If a replaced part receives a scrap disposition, the part must be scrapped in accordance with all applicable local, state and federal environmental protection and hazardous material regulations.

**EXCESS STOCK RETURN**

Excess stock returned for credit must have been purchased from Ford Customer Service Division in accordance with Policy Procedure Bulletin 4000.

**REPLACED FSA PARTS INSPECTION AND SIGN OFF**

Effective March 1<sup>st</sup> 2021 all parts replaced as part of an FSA repair with a repair order open date of March 1<sup>st</sup> 2021 or later must be inspected and signed off on the repair order by a member of your dealers fixed operations management team or an employee the task has been delegated to. If the task is to be delegated to a non-management employee, the employee needs to be someone other than the technician who completed the repair and needs to understand the importance of completing this task consistently and accurately.

- All parts replaced as part of an FSA repair should be returned to the parts department following the Warranty Parts Retention and Return Policies.
- Inspect the replaced parts to verify the FSA repair was completed.
- If the FSA repair is found to be complete, the designated employee signs the repair order line or parts return stamp area (electronic or hand signed) for the FSA repair indicating the parts were inspected and validated to have been replaced.

**Replaced FSA Parts Inspection and Sign Off Continued On The Next Page**

**Customer Satisfaction Program 21M05 - Supplement # 2**

Certain 2017-2022 Model Year Super Duty Vehicles Equipped with a Power Release Tailgate  
Unintended Tailgate Opening

**REPLACED FSA PARTS INSPECTION AND SIGN OFF (continued)**

- After the parts have been inspected, they should be handled based on the guidance in the parts status report in the Online Warranty System (Hold, Return, CORE, Scrap, etc.).
- This process is subject to review during warranty audits for FSA repairs with a repair order open date of March 1<sup>st</sup> 2021 or later. Any eligible FSA claims requiring parts replacement, found not to have been inspected and signed off during a warranty audit will be subject to chargeback and consideration for enrollment into the Dealer Incomplete Recall Repair Process.

**Note:** Other approvals (electronic or handwritten) for add-on repair lines, dealer owned vehicle repairs, and repeat repairs do not qualify as FSA parts inspection approvals. The post repair FSA parts inspection process (electronic or handwritten) is independent from other warranty approval requirements. The approval by the designated employee implies that the FSA parts were found to be replaced and must be able to be clearly identified on the Repair Order. If multiple FSA's require approval on a single Repair Order, each applicable occurrence will require individual post repair approval by the designated employee.

## CERTAIN 2017-2022 MODEL YEAR SUPER DUTY VEHICLES EQUIPPED WITH A POWER RELEASE TAILGATE — UNINTENDED TAILGATE OPENING

### **NEW !** SERVICE PROCEDURE

**NOTE:** For model years 2017-2019, Safety Recall 19S48 must be completed prior to performing this service procedure.

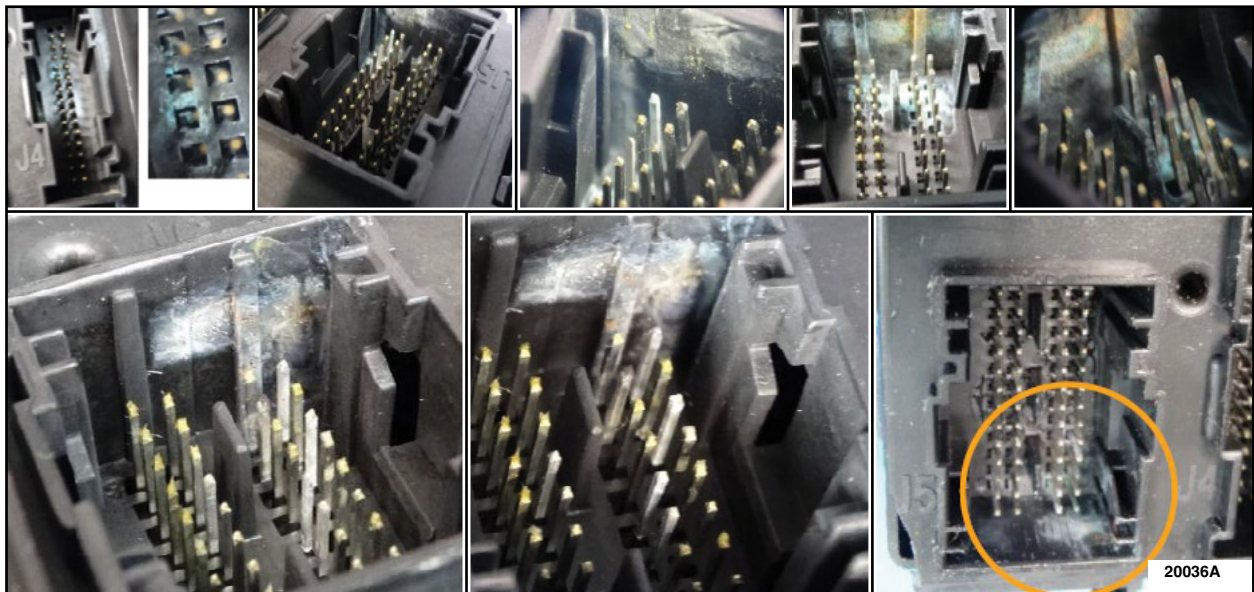
**NOTE:** At the completion of this repair, dealership service management is to provide a copy of the "Customer Information Sheet" and a copy of the "Owner's Manual Addendum" that is posted with this bulletin to the vehicle owner.

**NOTE:** The tailgate is required to perform the complete repair but does not need to be installed on the vehicle.

1. Lower the tailgate of the vehicle.
2. Open the hood of the vehicle.
3. If equipped, open the roof opening panel.
4. Disconnect the negative battery cable(s) and position aside. Please follow the Workshop Manual (WSM) procedures in Section 414-01.
5. Remove the Body Control Module (BCM). Please follow the WSM procedures in Section 419-10.
6. Inspect the BCM for any sign(s) of moisture and/or corrosion. See Figure 1 for examples of corrosion.
  - Was any sign(s) moisture and/or corrosion present?

Yes - **Photo(s) of BCM water contamination MUST be submitted to the Special Service Support Center (SSSC) prior to continuing with water leak diagnostics.** Then proceed to Step 8.

No - Proceed to Step 7.



**FIGURE 1**



7. Remove each BCM fuse, one at a time, and inspect for any sign(s) of moisture and/or corrosion.  
See Figure 2.

- Was any sign(s) of moisture and/or corrosion present?

Yes - **Photo(s) of BCM water contamination MUST be submitted to the SSSC prior to continuing with water leak diagnostics.** Then proceed to Step 8.

No - Proceed to Step 36 (Page 12).

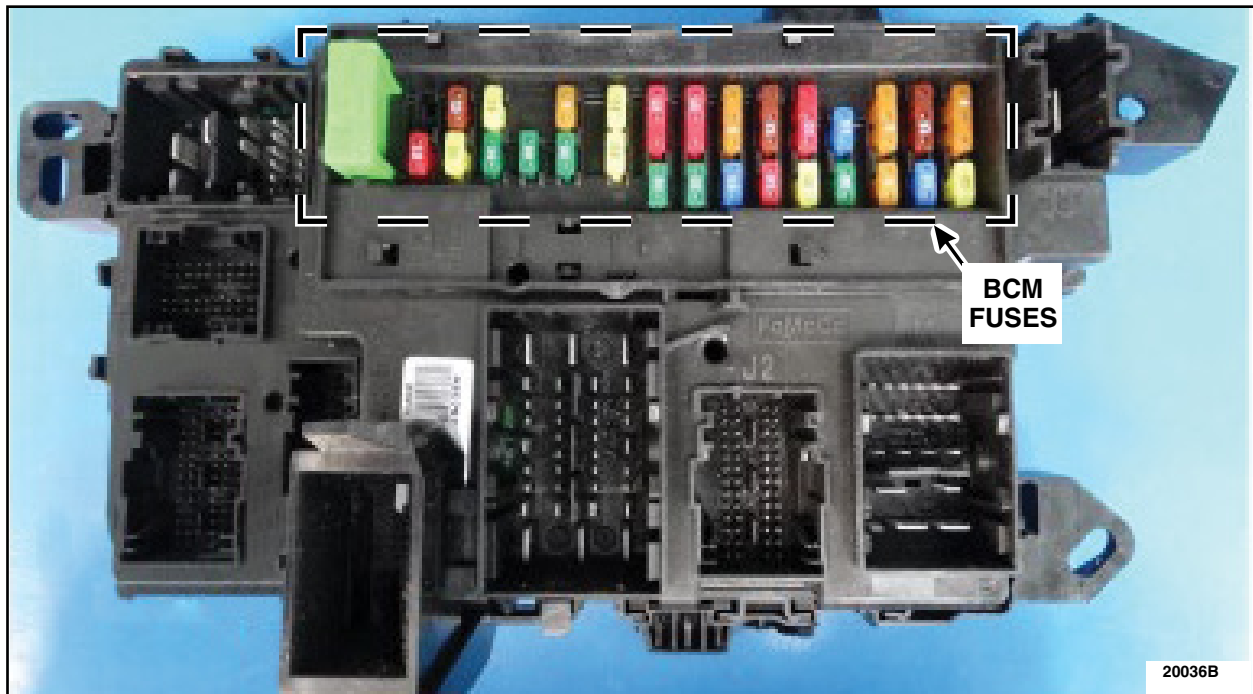


FIGURE 2

8. Is the vehicle equipped with a roof opening panel? See Figure 3.

Yes - Proceed to Step 9.

No - Proceed to Step 19 (Page 6).

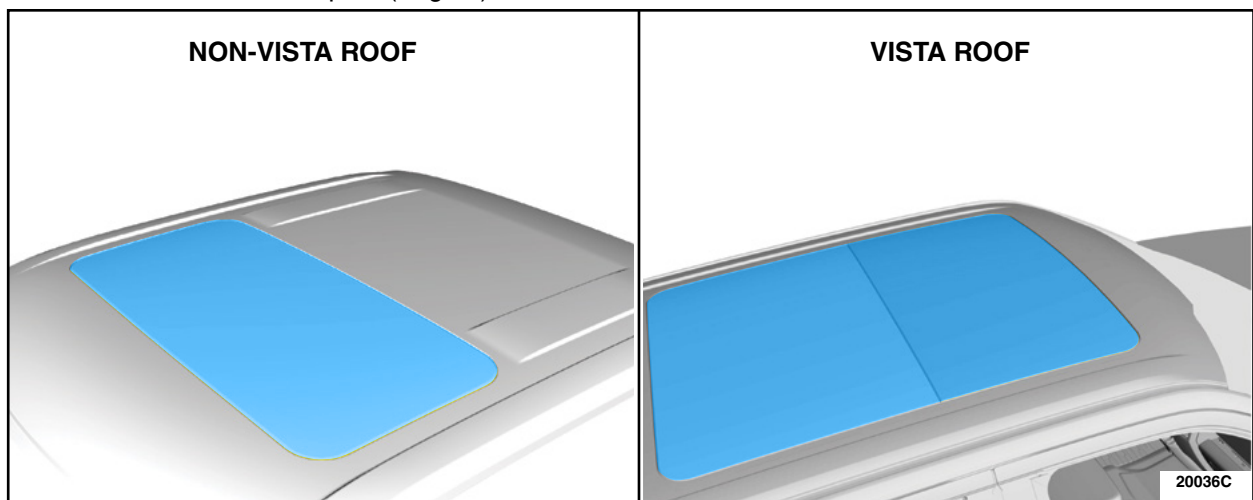
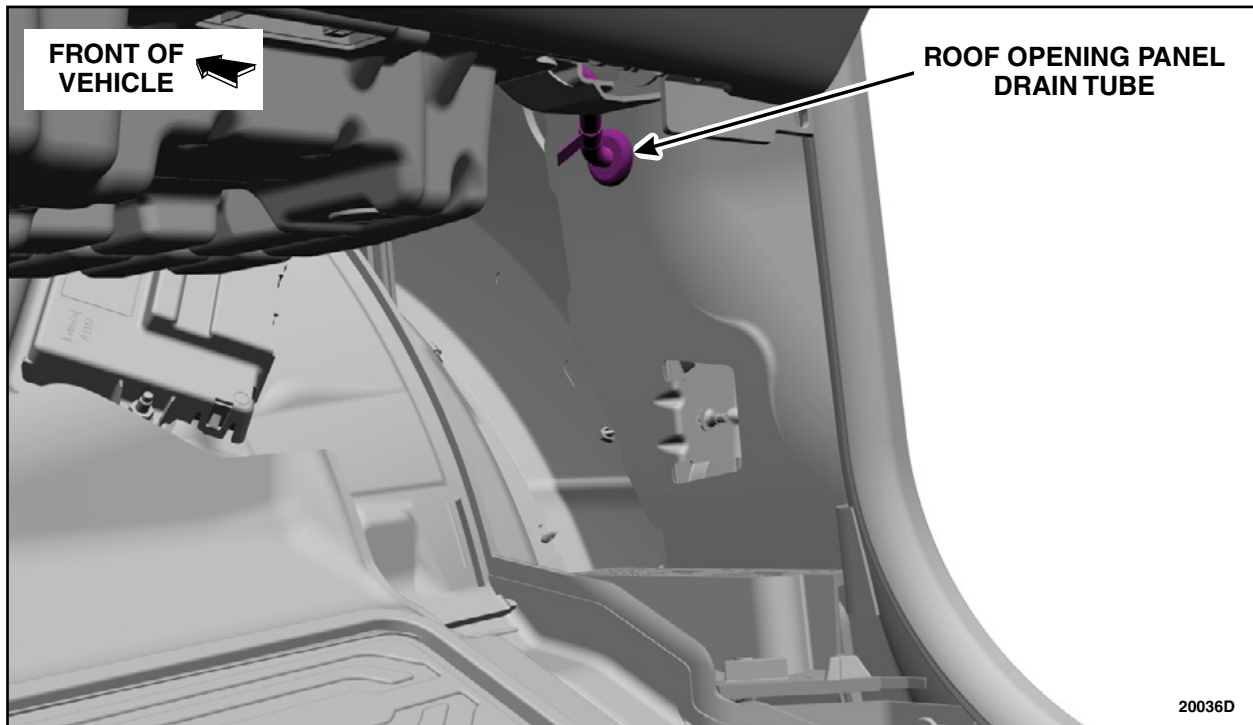


FIGURE 3





9. Locate the roof opening panel drain tube on the Right Hand (RH) side of the vehicle behind the BCM. See Figure 4.

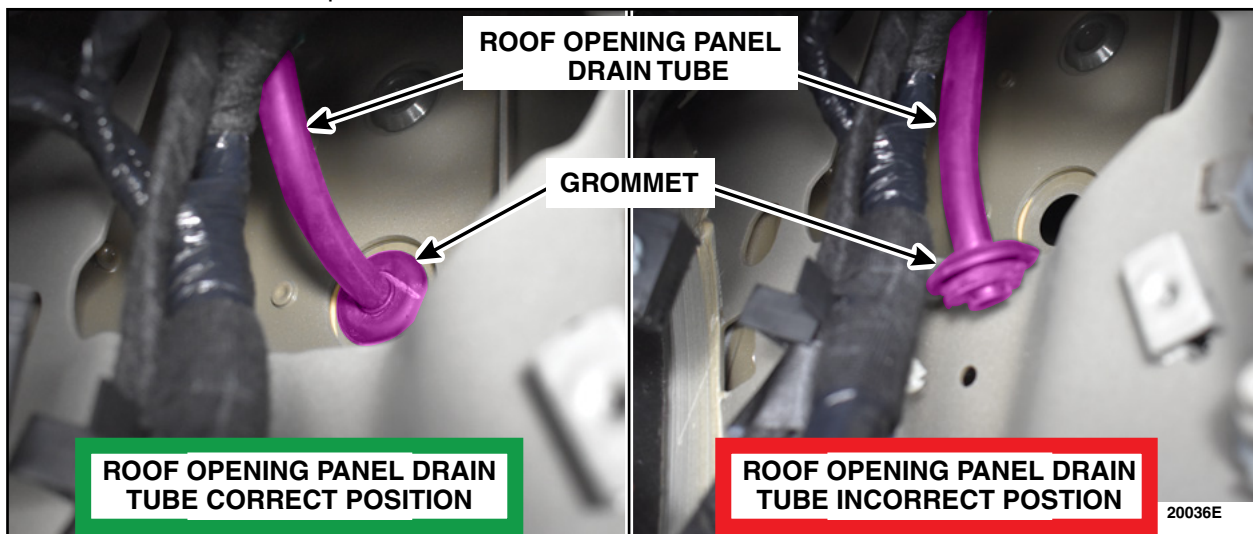


**FIGURE 4**

10. Inspect the roof opening panel drain tube and grommet.  
- Is the drain tube and grommet in the correct position? See Figure 5.

Yes - Proceed to Step 17 (Page 6).

No - Proceed to Step 11.



**FIGURE 5**





11. Is the grommet attached to the roof opening panel drain tube as seen in Figure 6?

Yes - Proceed to Step 12.

No - Proceed to Step 13.

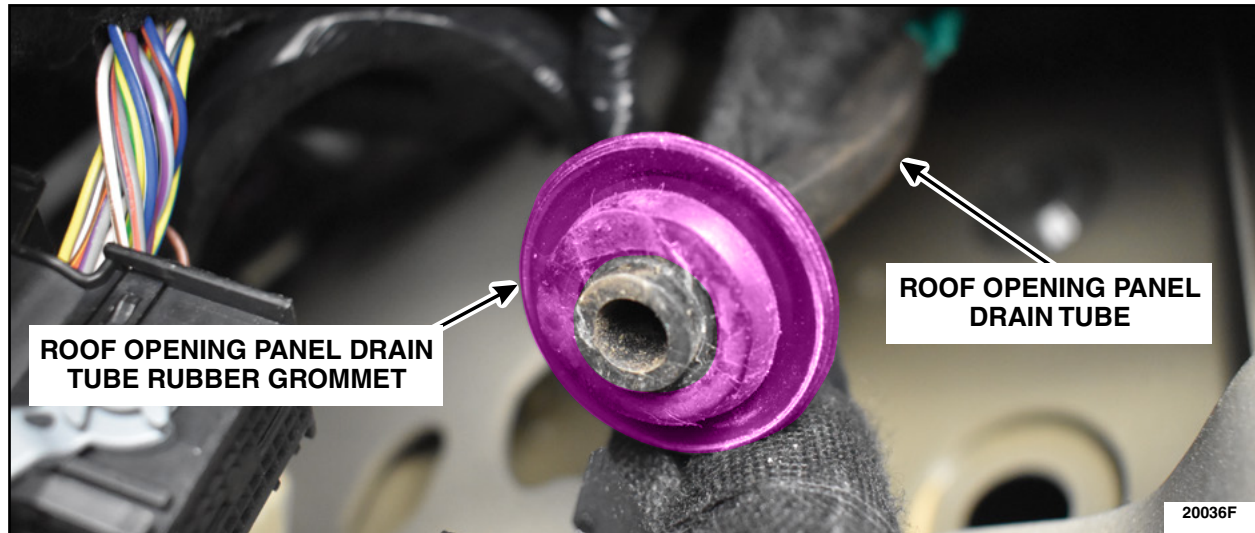


FIGURE 6

12. Install the roof opening panel drain tube into the body panel making sure that the grommet is fully seated. Perform a 2 tug test on the roof opening panel drain tube.

- Did the drain tube and grommet remain in place? See Figure 7.

Yes - Proceed to Step 17 (Page 6).

No - Proceed to Step 13.

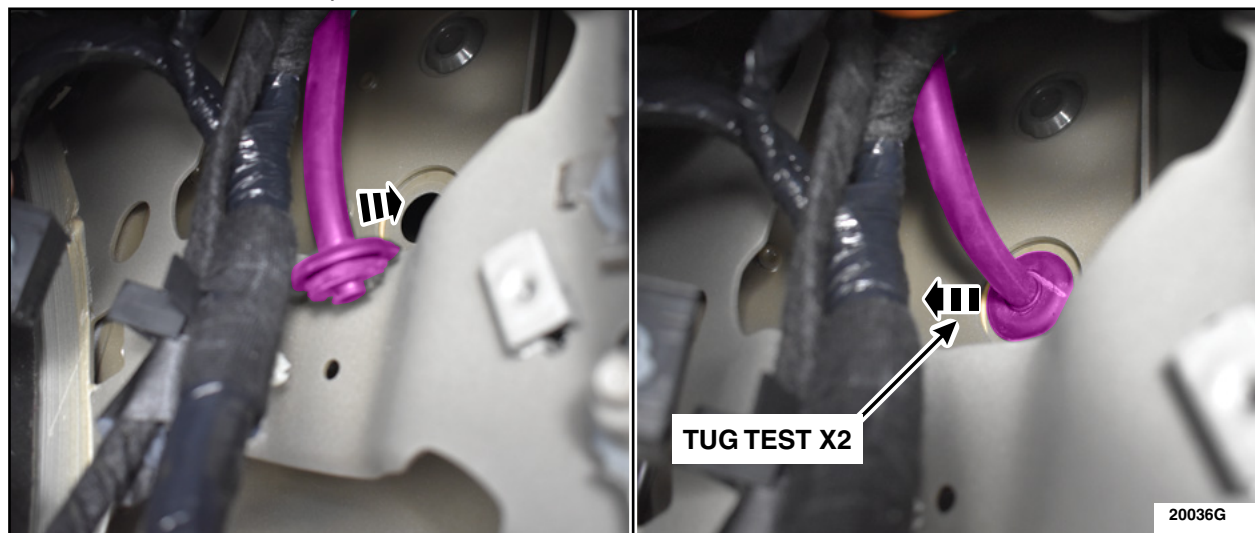


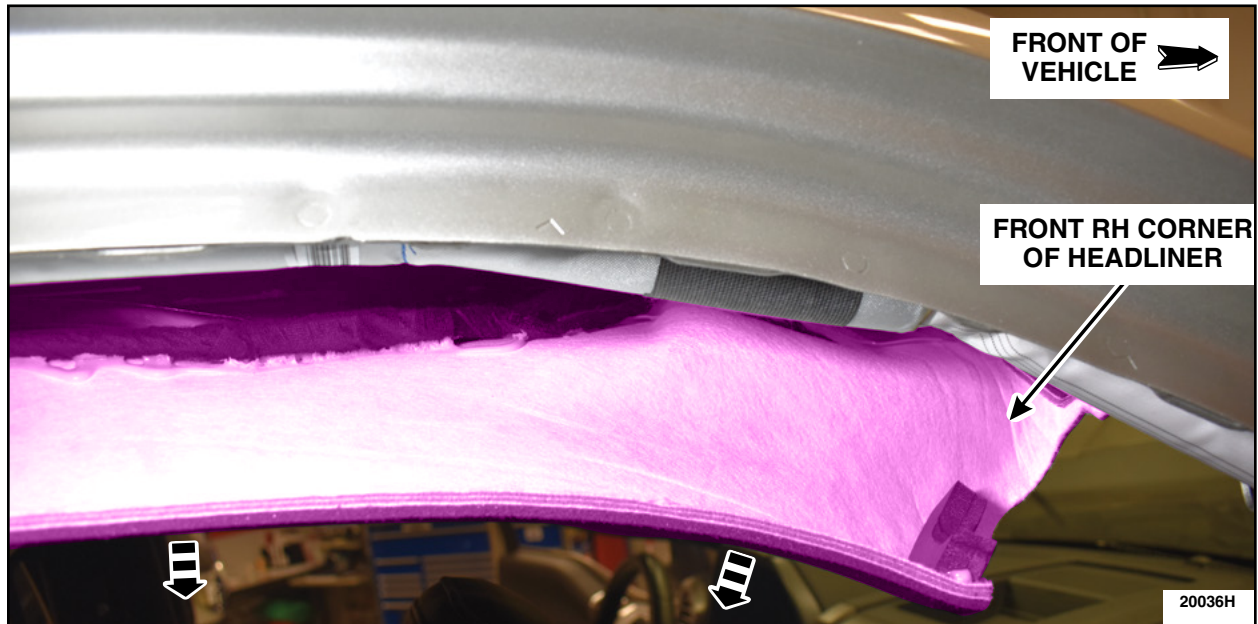
FIGURE 7



13. Remove the RH A-Pillar Trim Panel. Please follow the WSM procedures in Section 501-05.

14. Lower the front RH corner of the headliner. See Figure 8.

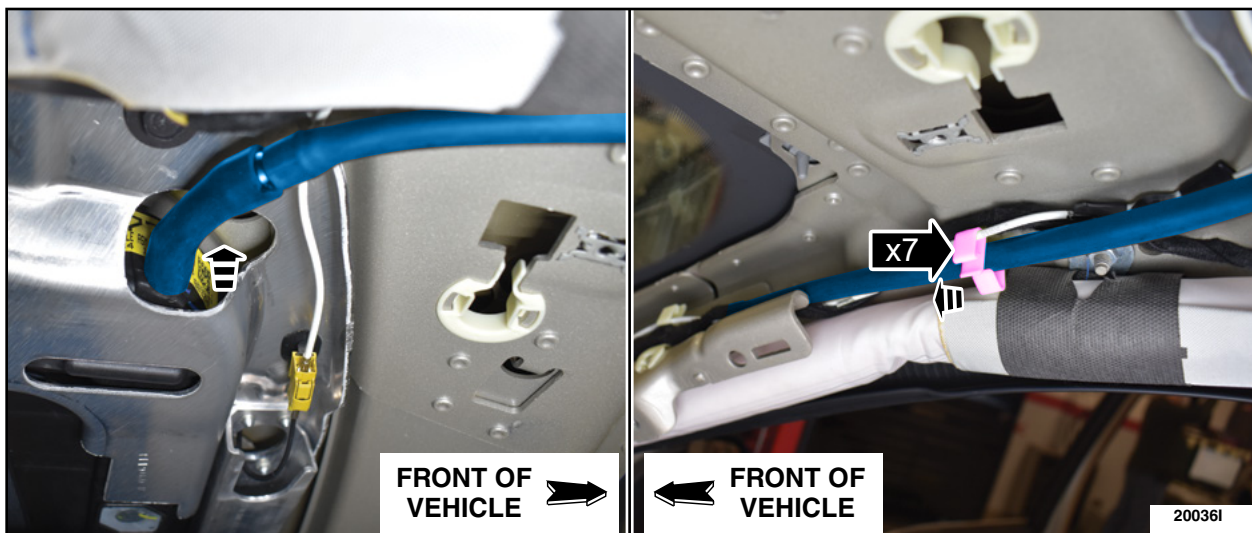
**CAUTION:** Do not bend or crease the headliner.



**FIGURE 8**

15. Remove the roof opening panel drain tube. See Figure 9.

1. Remove the drain tube grommet located behind the BCM.
2. Disconnect the drain tube at the roof opening panel.
3. Release the drain tube retainers located along the RH A-pillar down through the Instrument Panel (IP).
4. Remove the drain tube out the top of the IP.



**FIGURE 9**



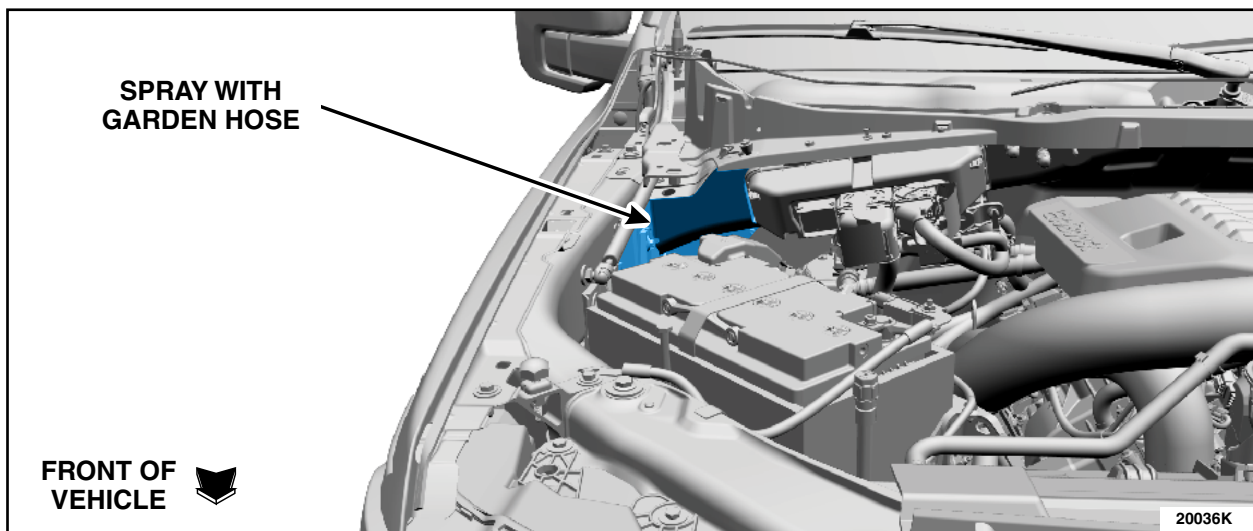
16. Install a *new* roof opening panel drain tube by reversing Step 15.
17. Pour a glass of water into the roof opening panel drain tube channel and immediately inspect the roof opening panel drain tube grommet for water leakage. See Figure 10.
- Is there water leakage inside the vehicle at the grommet?
- Yes - Proceed to Step 18.  
No - Proceed to Step 19.



**FIGURE 10**

18. Check that the roof opening panel drain tube rubber grommet is fully seated, then repeat Step 17.
- Is the roof opening panel drain tube rubber grommet fully seated and still leaking after the second inspection?
- Yes - Proceed to Step 15.  
No - Proceed to Step 19.

19. Using a garden hose, spray the upper RH side of the engine compartment fire wall. See Figure 11.



**FIGURE 11**





20. Immediately inspect under the RH side IP, near the BCM, for any sign(s) of water leakage and/or moisture.

- Was any sign(s) of water leakage and/or moisture present?

Yes - Proceed to Step 21.

No - Proceed to Step 25 (Page 8).

21. Remove the Instrument Panel. Please follow the WSM procedures in Section 501-12.

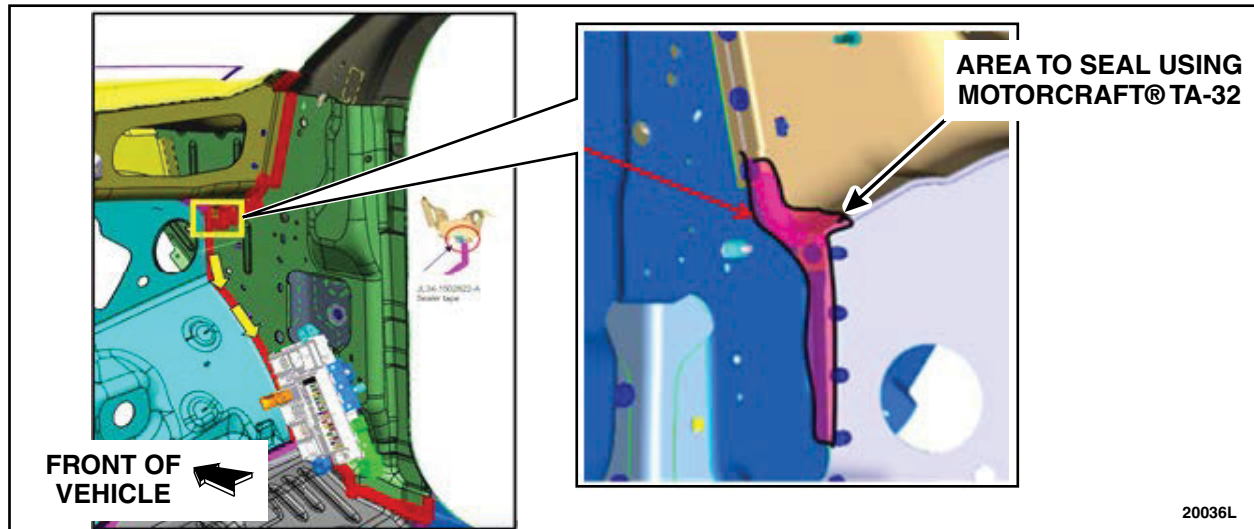
22. Verify the location of the water leak by repeating Step 19.

23. Using Motorcraft® TA-32 Clear Silicone Rubber Sealer or equivalent, apply a bead along the body patch and allow it to dry. See Figure 12. Retest by performing Step 19 once the Clear Silicone Rubber is dry.

- Was any water leakage found after sealant has dried?

Yes - Apply more sealant by performing Step 23.

No - Proceed to Step 24.



**FIGURE 12**

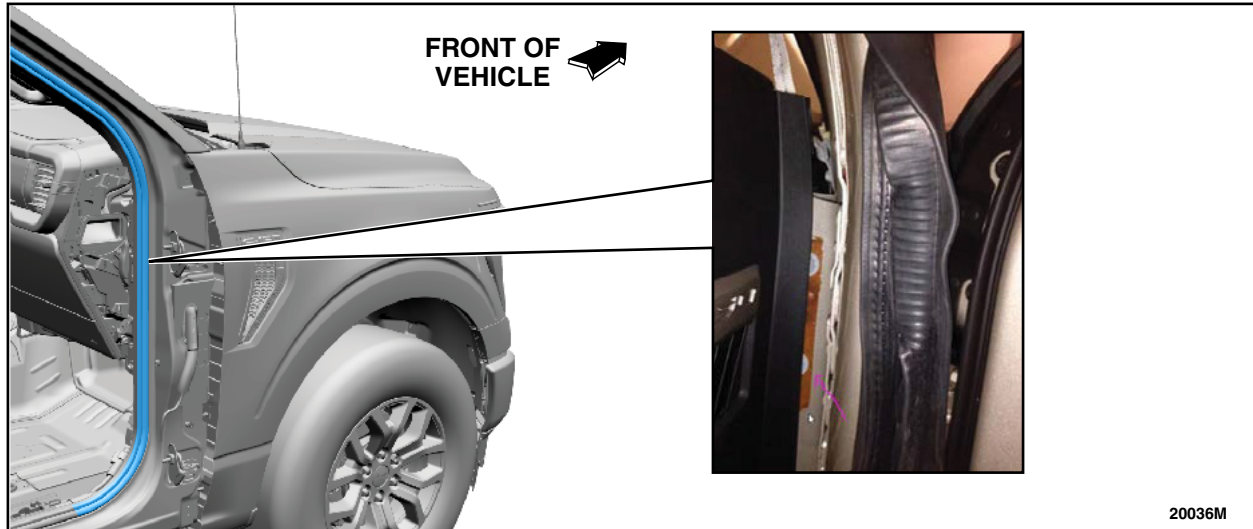
**NOTE:** Do not install the RH A-pillar, scuff plate, or BCM cover at this time.

24. Install the Instrument Panel. Please follow the WSM procedures in Section 501-12.



25. Inspect the front RH side door weatherstrip for any rips or deformity. See Figure 13.  
- Were any rips or deformity present?

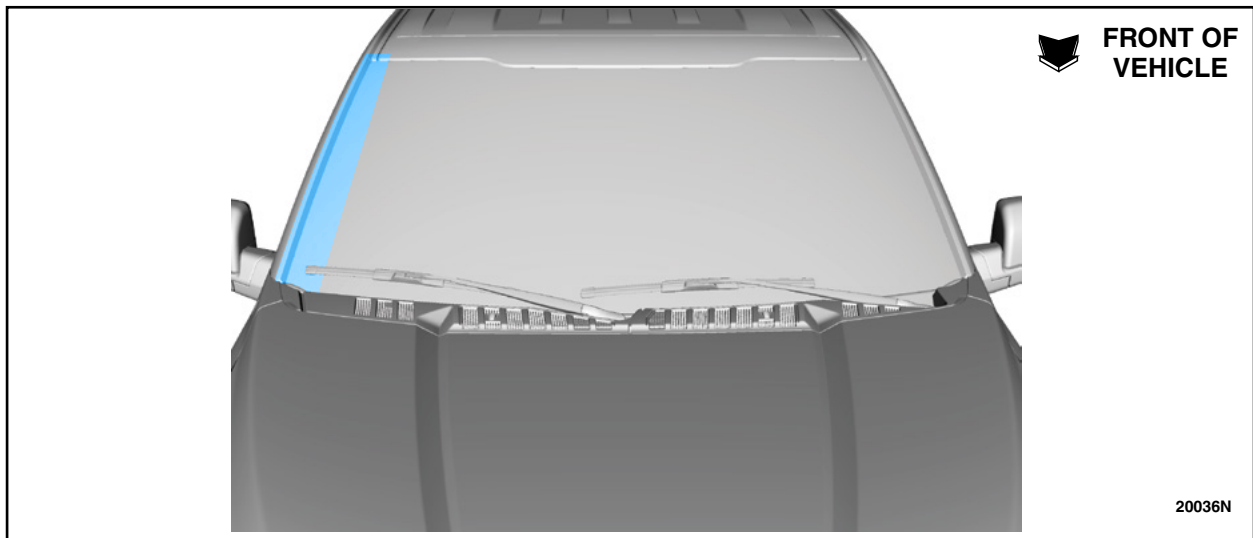
Yes - Install a *new* Front Passenger Door Weatherstrip. Proceed to Step 26.  
No - Proceed to Step 26.



**FIGURE 13**

26. Using a garden hose, spray down the RH side of the windshield, then immediately inspect the A-pillar area within the vehicle for signs of moisture and/or leakage. See Figure 14.  
- Was any sign of moisture and/or leakage found around the A-pillar?

Yes - Remove, then reseal the windshield. Please follow the WSM procedures in Section 501-11.  
Repeat Step 26.  
No - Proceed to Step 27.



**FIGURE 14**



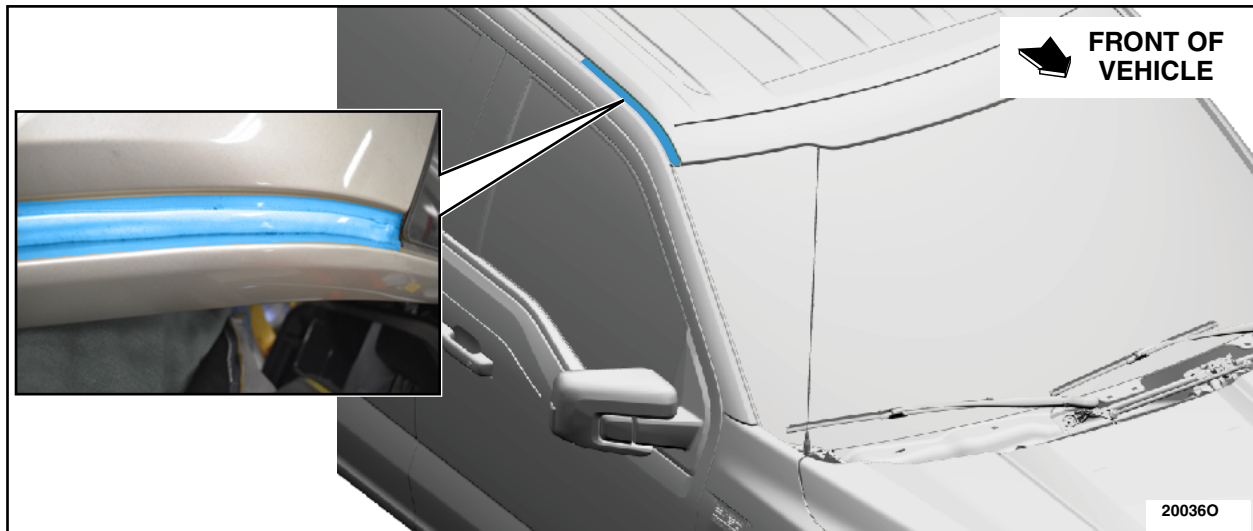
27. Using a garden hose, run water over the front RH roof ditch, immediately inspect the A-pillar inside the vehicle for signs of moisture and/or leakage. See Figure 15.

- Was any signs of moisture and/or leakage found around the A-pillar?

Yes - Proceed to Step 28.

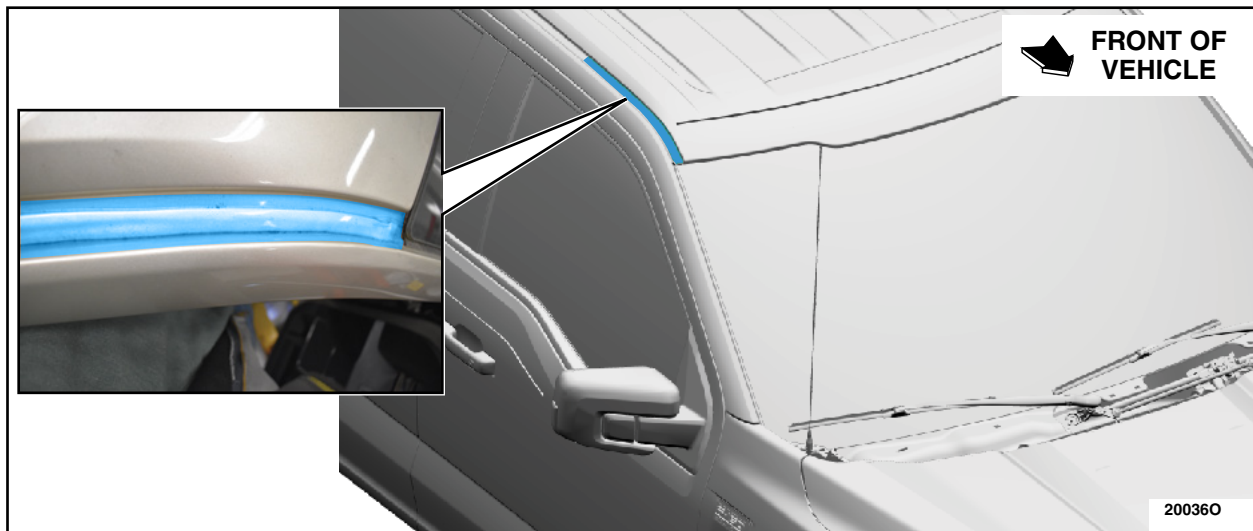
No - If equipped with a roof opening panel, Proceed to Step 29.

If NOT equipped with a roof opening panel, Proceed to Step 36 (page 12).



**FIGURE 15**

28. Apply some Motorcraft® TA-32 Clear Silicone Rubber to the front RH roof ditch. See Figure 16. Allow the sealer to cure, then proceed to Step 27.



**FIGURE 16**



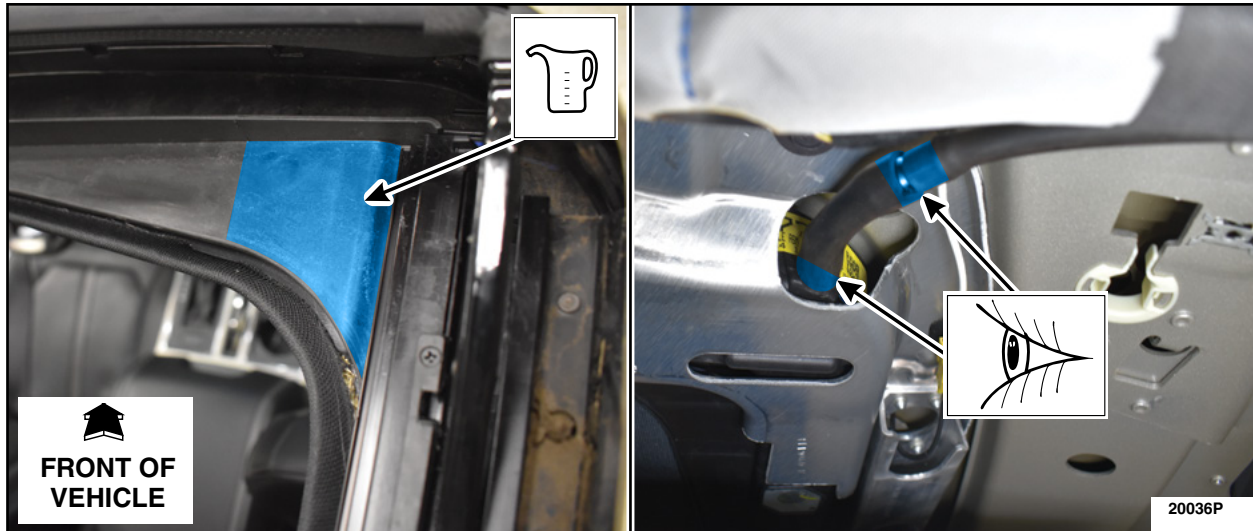
 **CAUTION:** Do not bend or crease the headliner.

29. Lower the front RH corner of the headliner. See Step 14, Figure 8. Pour a glass of water into the roof opening panel drain tube channel and immediately inspect the drain tube, at the roof opening panel for water leakage. See Figure 17.

- Is there water leakage from the roof opening panel drain tube?

Yes - Proceed to Step 30.

No - Proceed to Step 33.



**FIGURE 17**

30. Check that the roof opening panel drain tube is fully seated, then repeat Step 29.

- Is the drain tube fully seated and still leaking after the second inspection?

Yes - Proceed to Step 31.

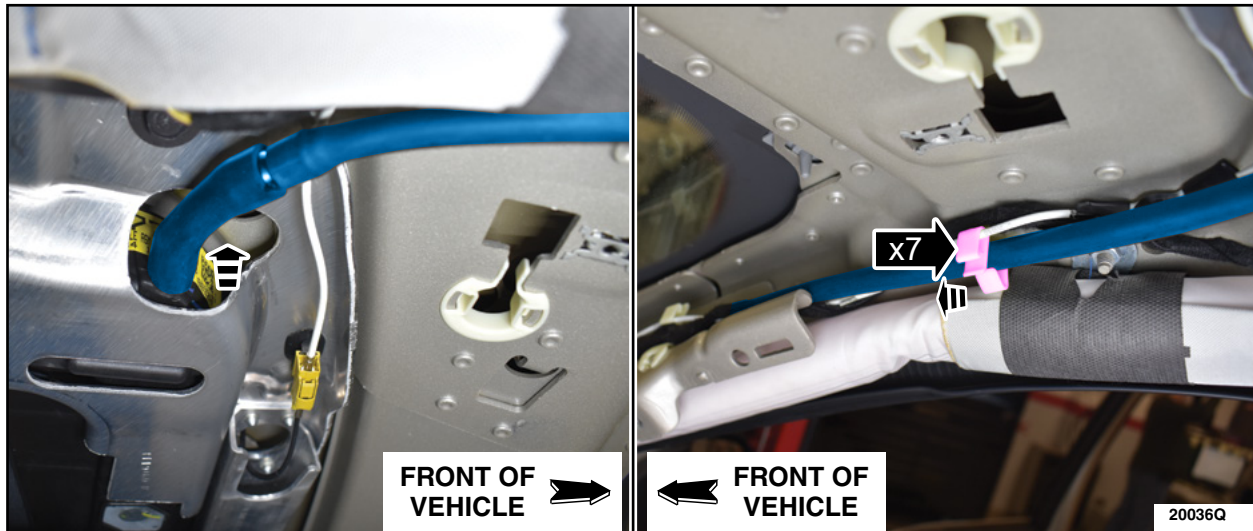
No - Proceed to Step 33.





31. Remove the roof opening panel drain tube. See Figure 18.

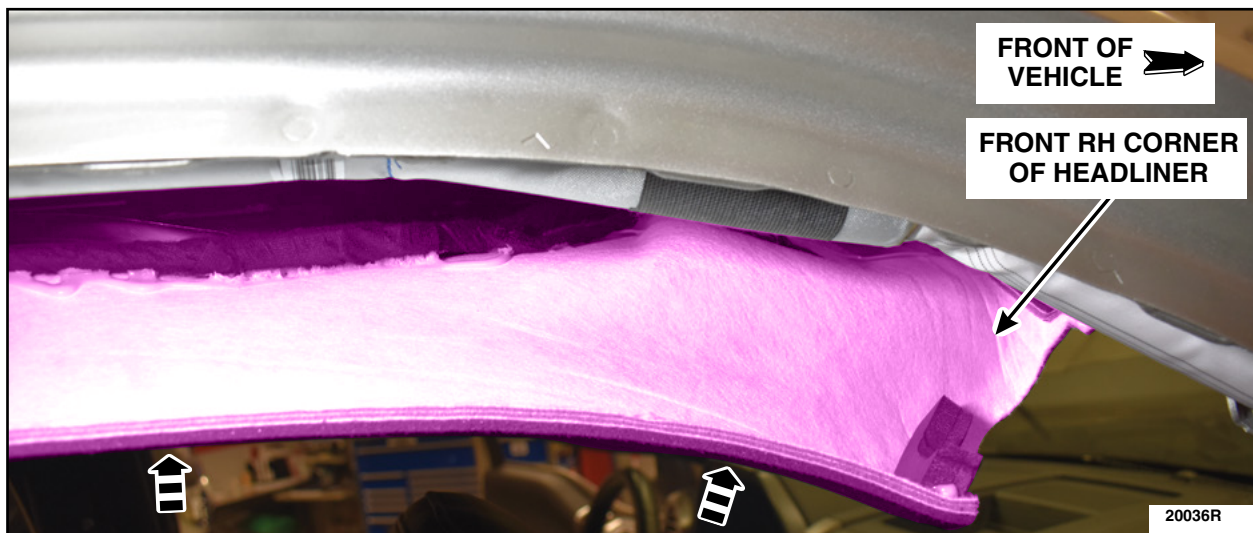
1. Remove the drain tube grommet located behind the BCM.
2. Disconnect the drain tube at the roof opening panel.
3. Release the drain tube retainers located along the RH A-pillar down through the IP.
4. Remove the drain tube out the top of the IP.



**FIGURE 18**

32. Install a *new* roof opening panel drain tube by reversing Step 31.

33. Position back the front RH corner of the headliner. See Figure 19.



**FIGURE 19**

34. If the previous water leak testing has not been successful in finding the source of the BCM contamination, please refer to WSM procedures under diagnosis and testing found in Section 501-00 to isolate and fix the water leak prior to continue with these instructions.

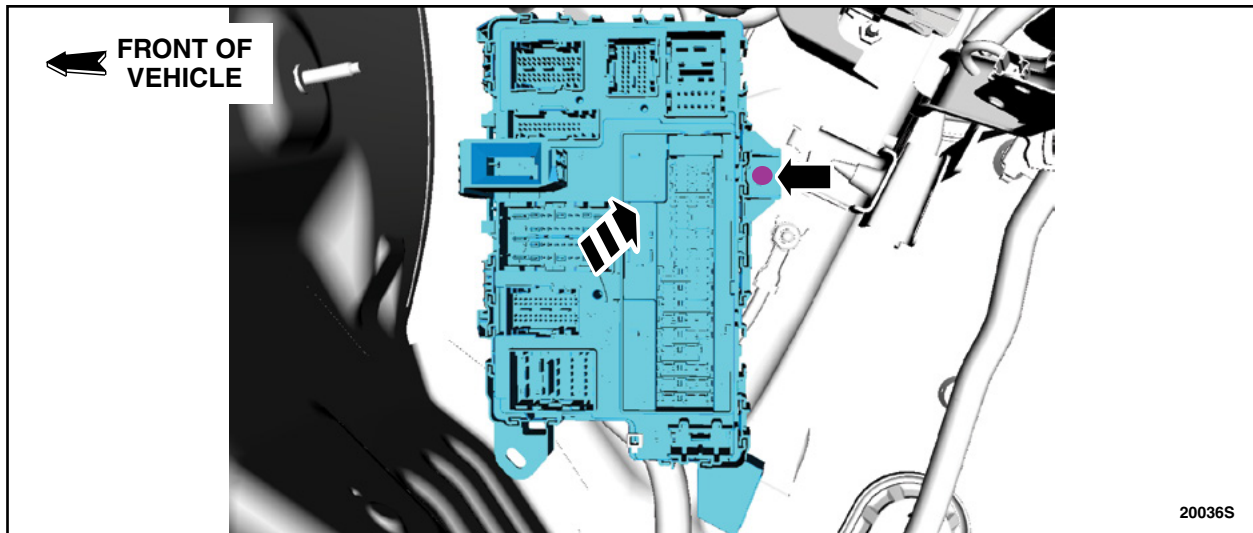
35. Install the RH A-Pillar Trim Panel. Please follow the WSM procedures in Section 501-05.



36. If the BCM is to be replaced due to corrosion and/or moisture, please follow the WMS procedures in Section 419-10 then transfer all fuses to a *new* BCM.

- Replace any corroded fuses with a *new* one.
- Discard the old BCM.

37. Install the BCM and retainer. See Figure 20.



**FIGURE 20**

38. Inspect all the harness side BCM connectors for sign(s) of moisture and/or corrosion.  
- Was any moisture and/or corrosion present?

Yes - For moisture ONLY - Blow dry the affected connector(s) and reconnect the BCM electrical connectors, then proceed to Step 39.

For corrosion - Order and install the appropriate terminal kit(s) for the affected terminal(s), reconnect the BCM electrical connectors, and then proceed to Step 39.

No - Reconnect the connectors to the BCM, then proceed to Step 39.



# Complete Tailgate Actuator Ground Wiring Part Kit

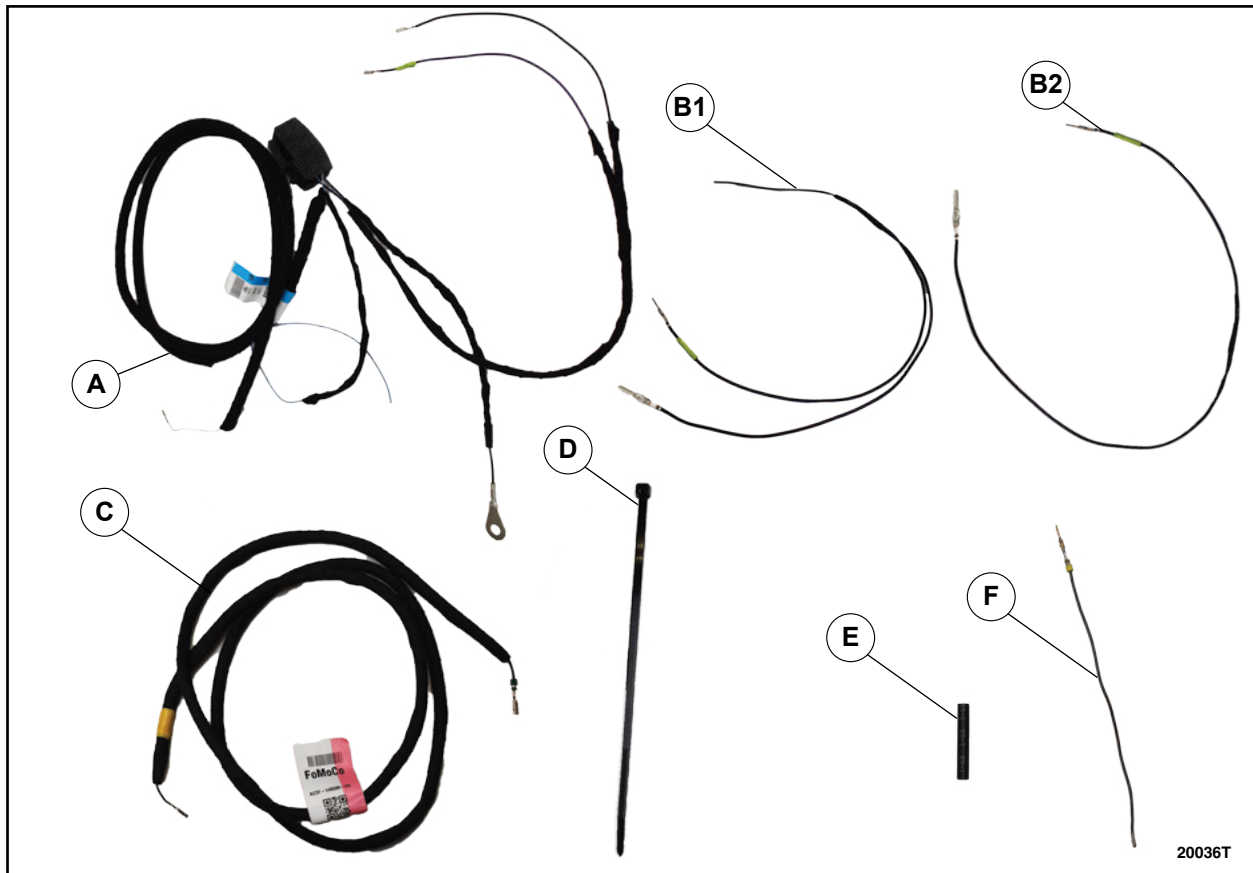


FIGURE 21

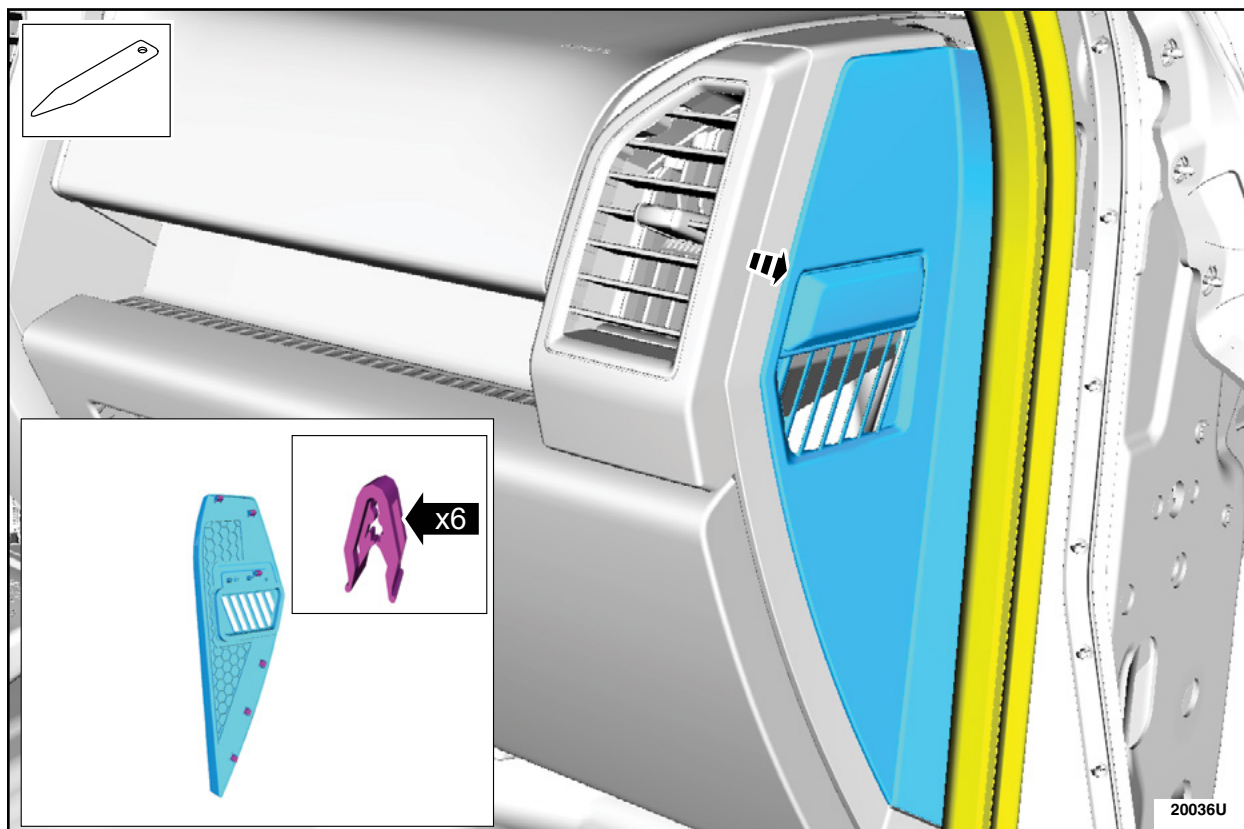
ITEM	DESCRIPTION	QUANTITY
A	Relay Harness	1
B1	Floor Board Jumper (3 end version)	*1
B2	Floor Board Jumper (2 end version)	*1
C	Tailgate Jumper Harness	1
D	Tie Strap	-
E	Heat Shrink Tubing	4
F	Under Body Harness Jumper	1

\* Kit will include either B1 or B2 Floor Board Jumper Harness.

**NOTE:** The parts being installed in this procedure are not labeled. Refer to Figure 21 for component identification.



39. Position aside the weatherstrip, release the clips and remove the RH instrument panel finish panel.  
See Figure 22.

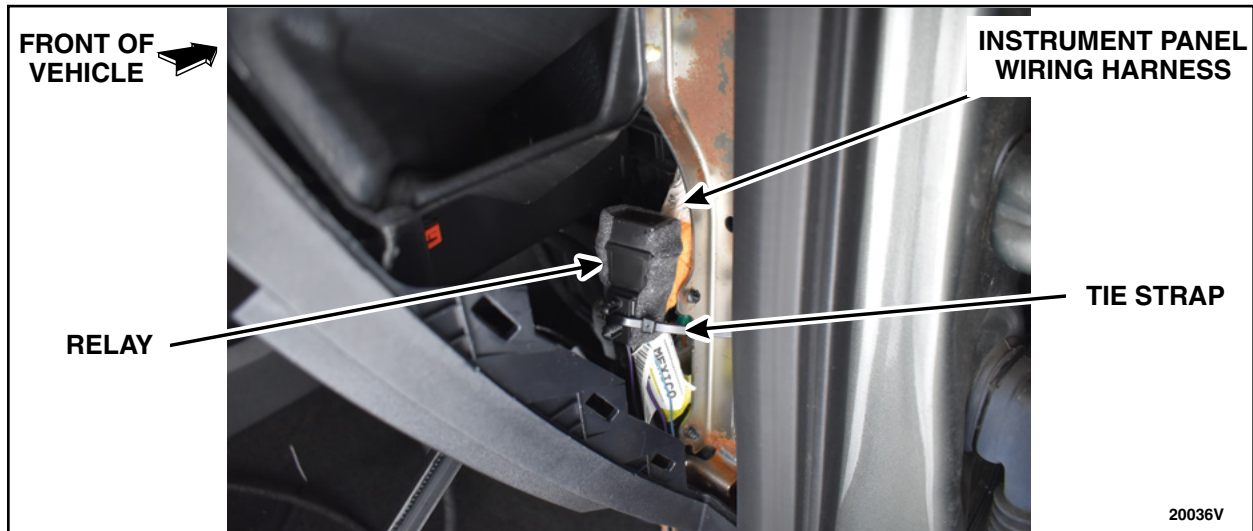


**FIGURE 22**

40. Remove the Glove Compartment. Please follow the WSM procedures in Section 501-12.

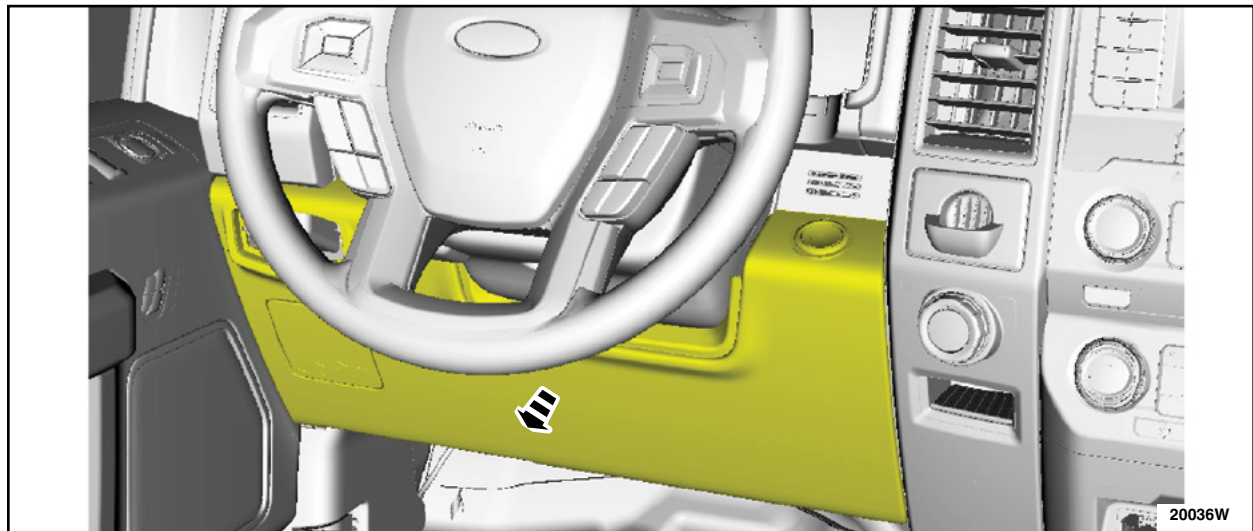


41. Place the relay, included in the kit, onto the instrument panel wiring harness and secure using a tie strap. See figure 23.



**FIGURE 23**

42. Lower the steering column opening trim panel. See Figure 24.



**FIGURE 24**





43. Remove the bolts and the lower steering column shroud. See Figure 25.

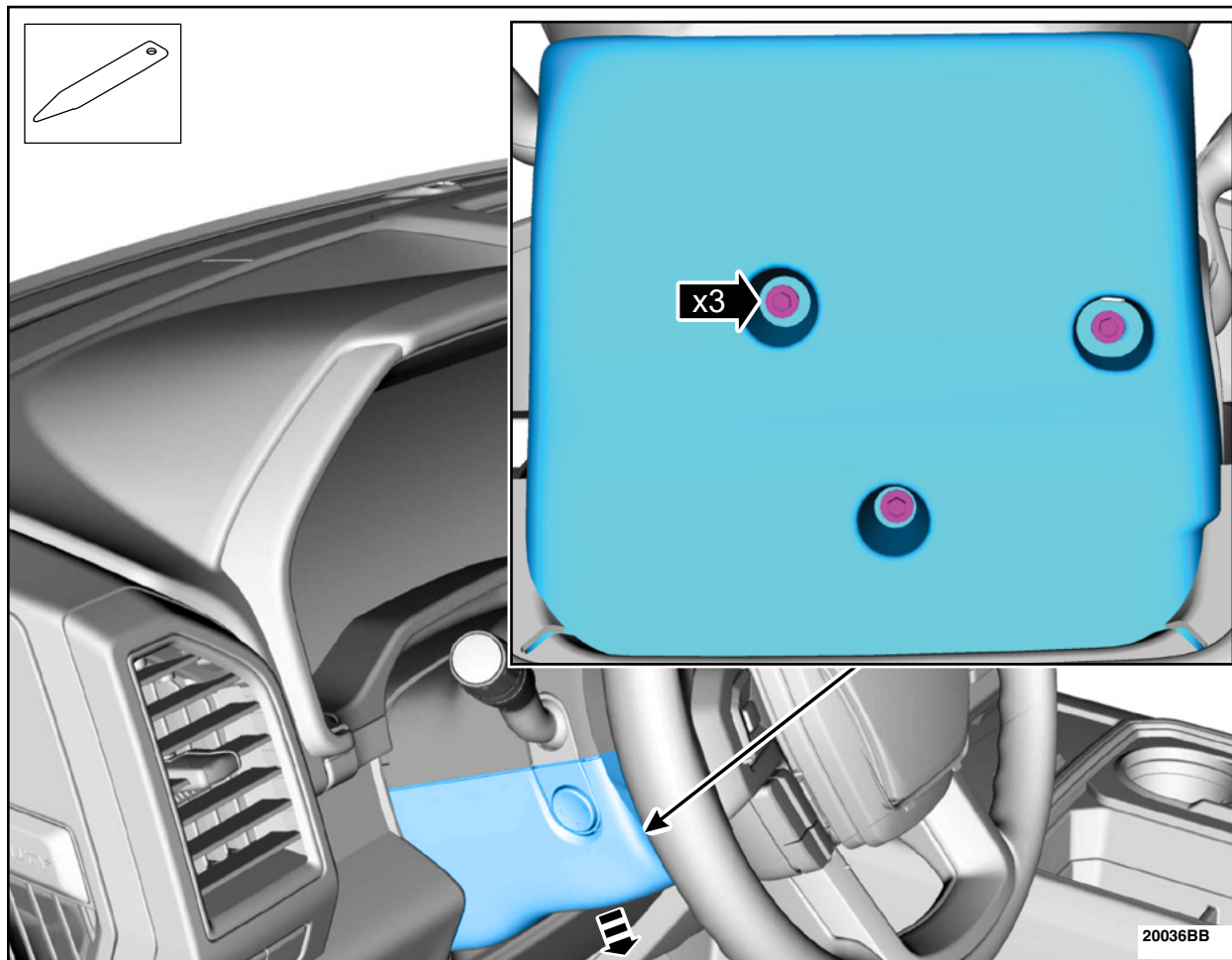


FIGURE 25



44. Remove the bolts and the steering column reinforcement panel. See Figure 26.

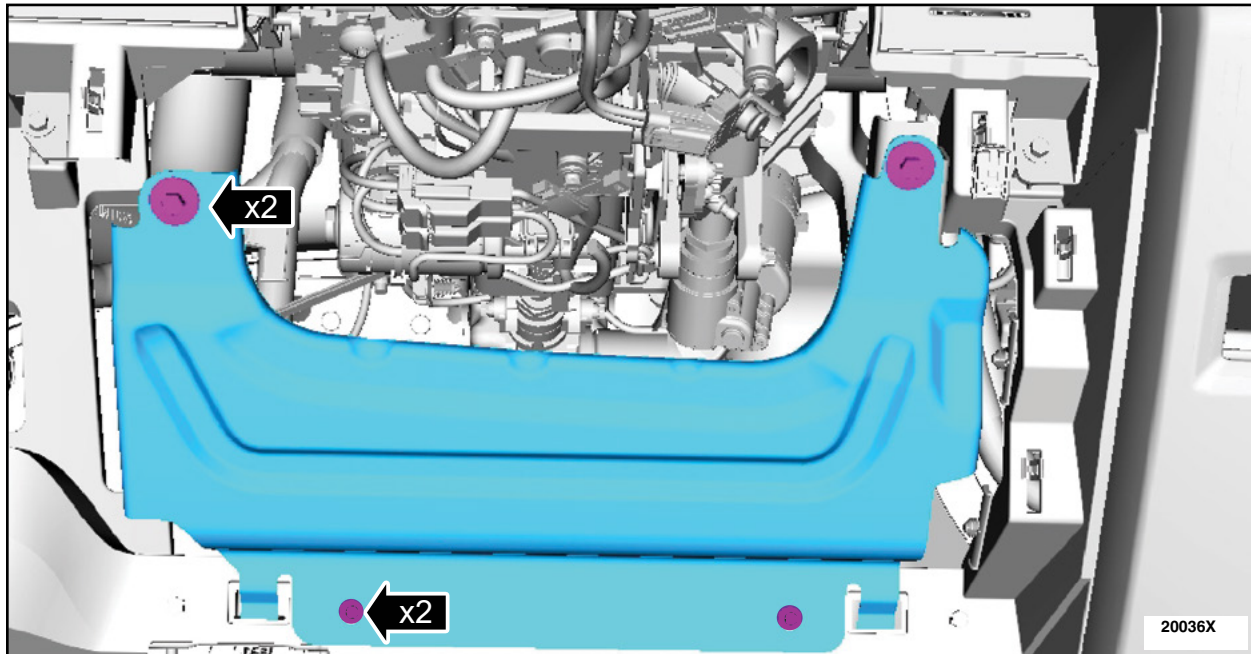


FIGURE 26

45. Using a coat hanger, route the longest wire from the relay through the instrument panel.  
See Figure 27.

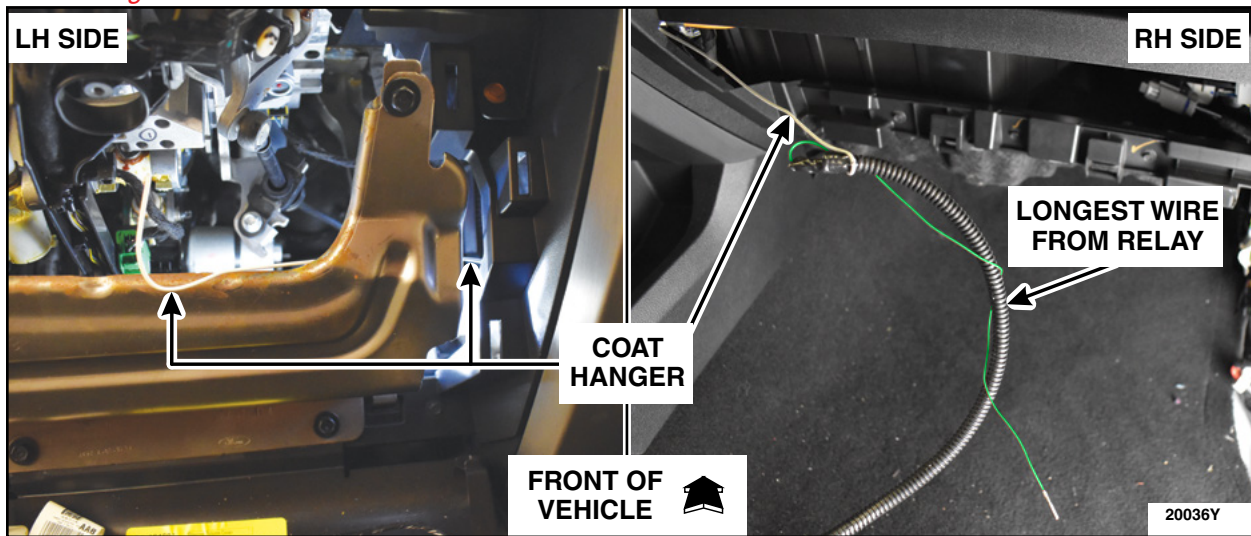
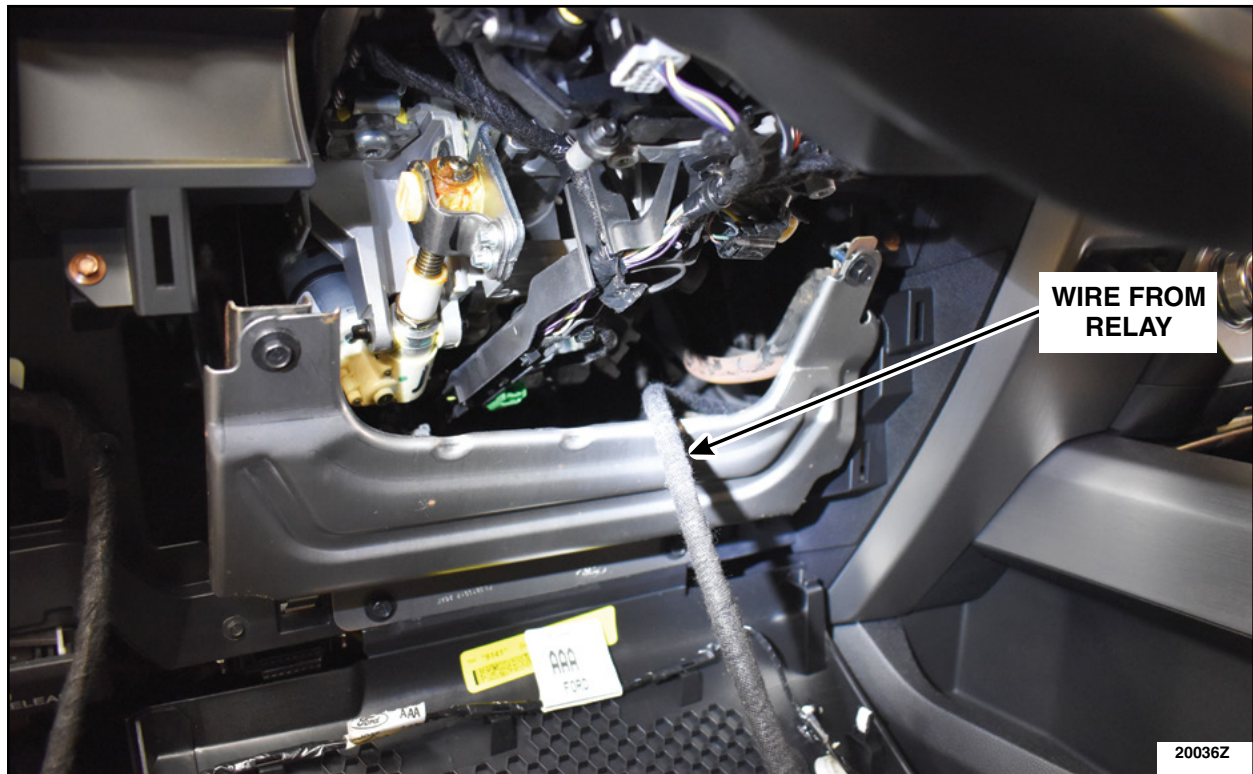


FIGURE 27



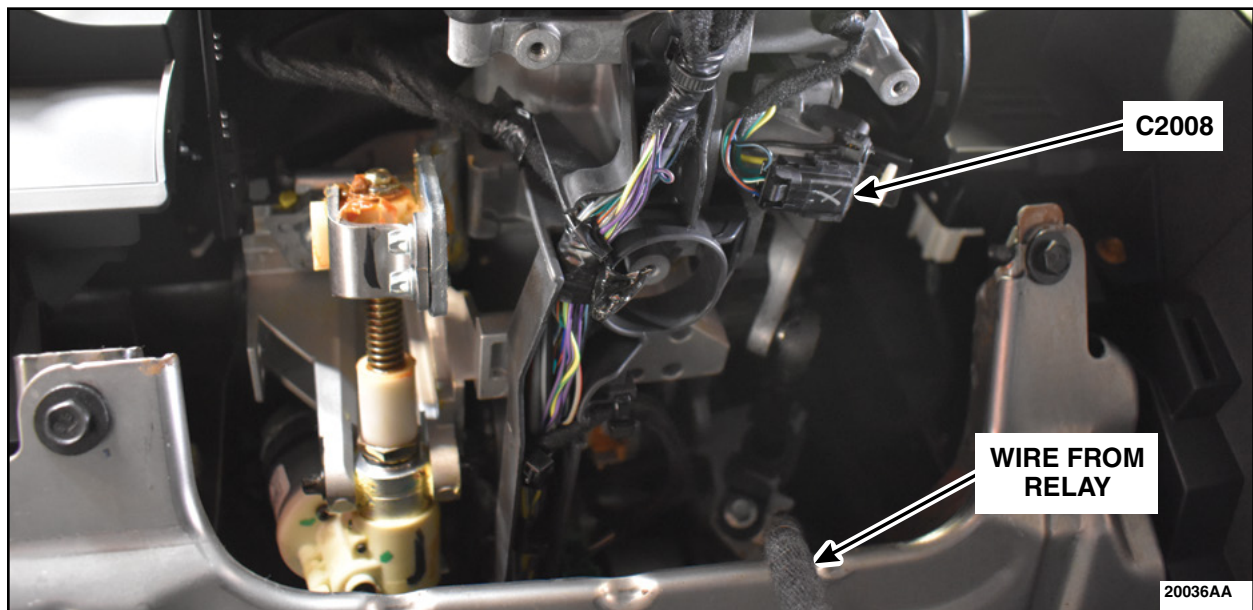


46. Pull the wire from the relay through the vehicle's instrument panel to the Left Hand (LH) steering wheel opening. See Figure 28.



**FIGURE 28**

47. Disconnect C2008 from the underside of the steering column. See Figure 29.



**FIGURE 29**



48. Disengage the white locking tab on C2008. Install the wire from the relay into the open cavity of C2008. Engage the white locking tab. See Figure 30.

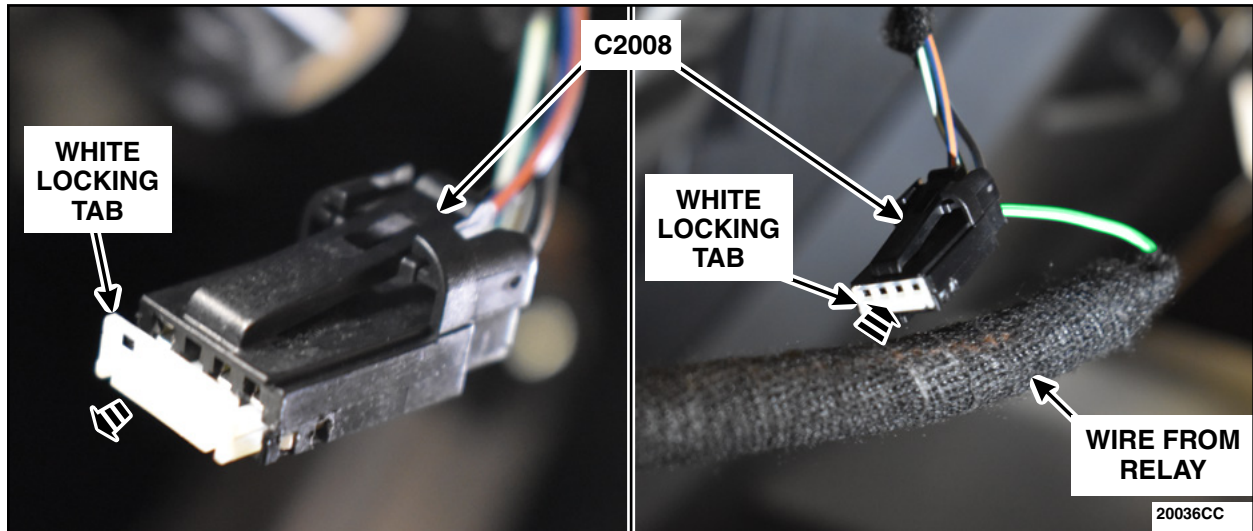


FIGURE 30

49. Reconnect C2008. See Figure 31.

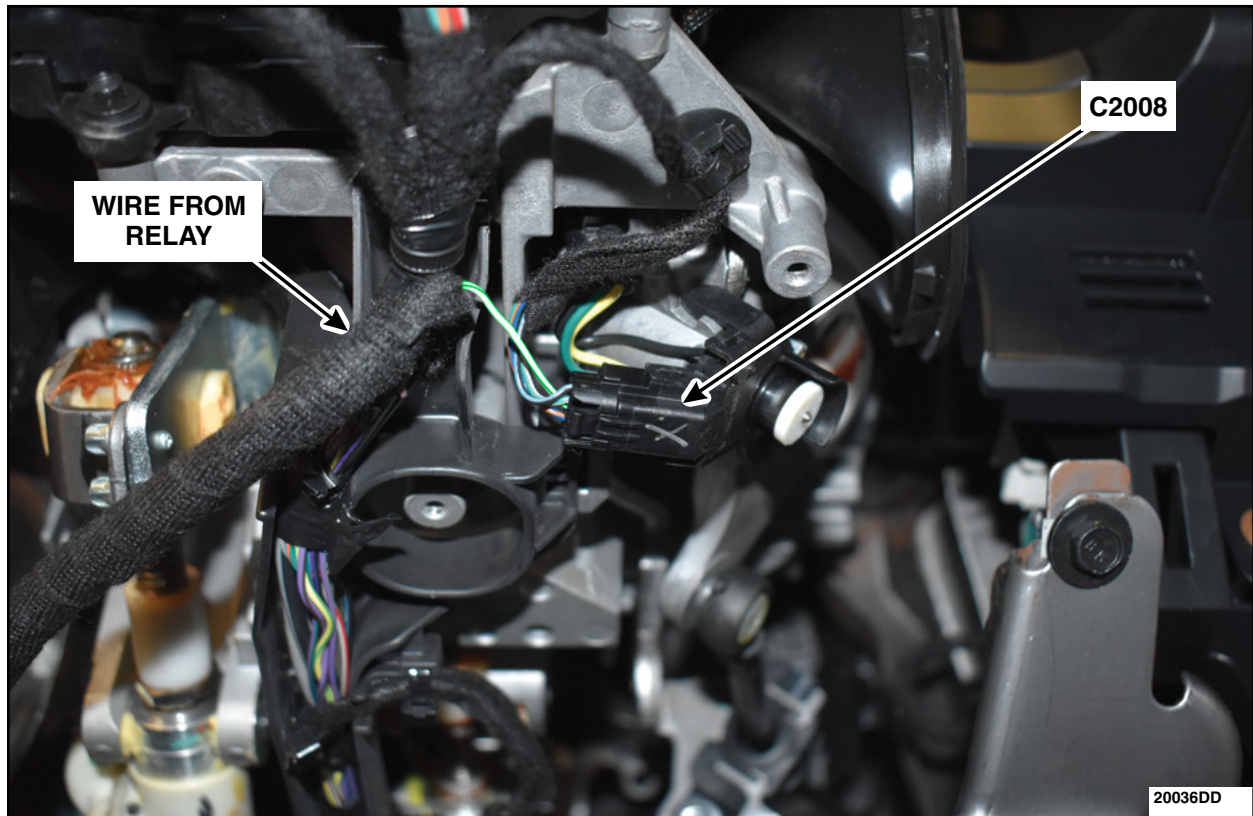


FIGURE 31





50. Secure the wire from the relay using tie straps. See Figure 32.

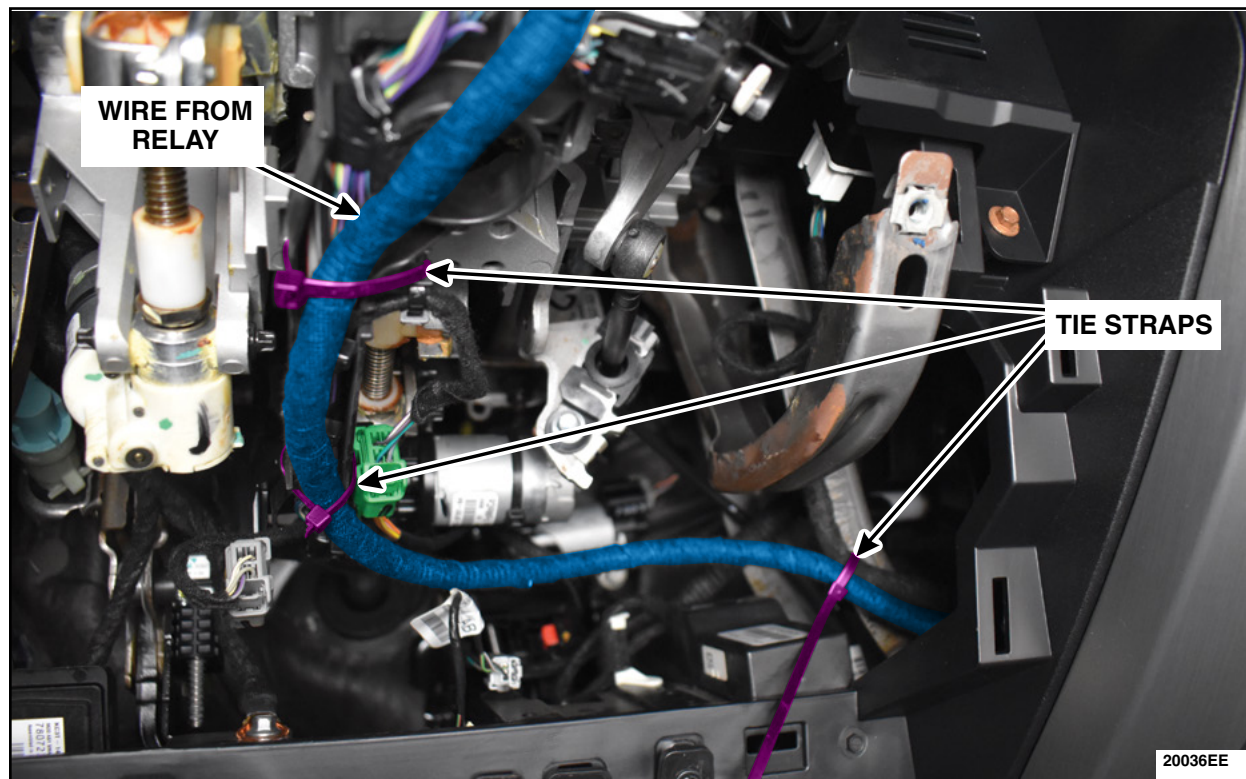


FIGURE 32



51. Install the steering column reinforcement panel and the bolts. See Figure 33.

- Torque: 80 lb.in (9 Nm)

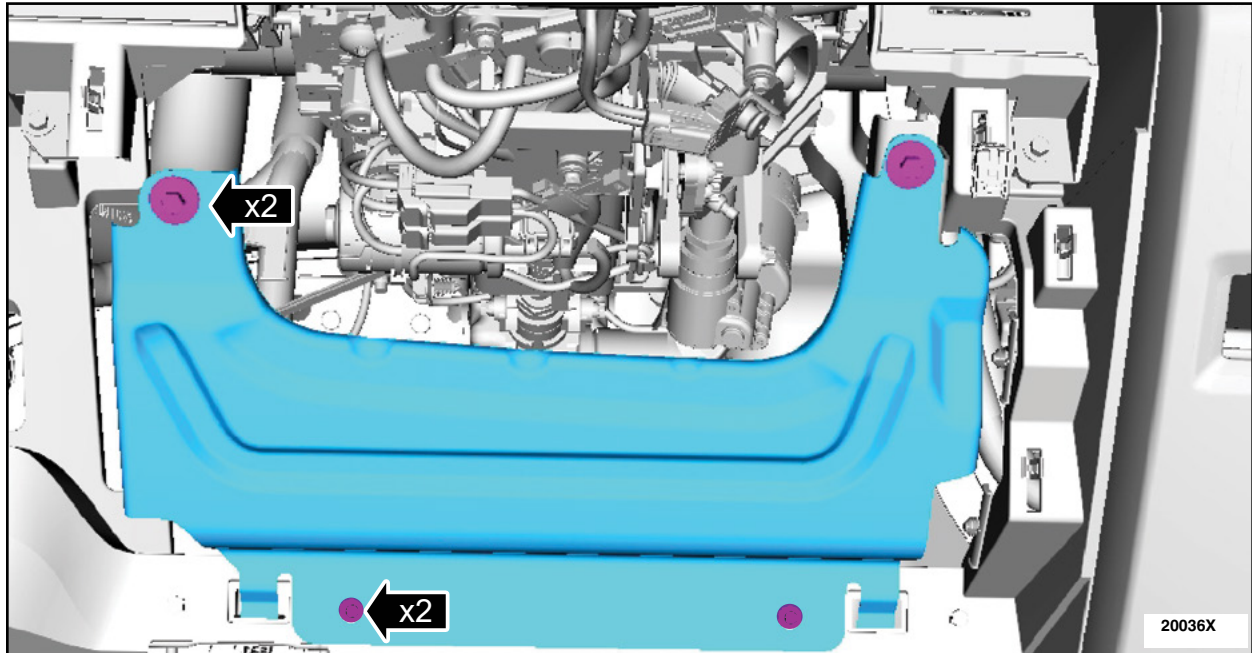


FIGURE 33

52. Secure the wire from the relay to the wiring harness on the climate control housing using tie straps. See Figure 34.

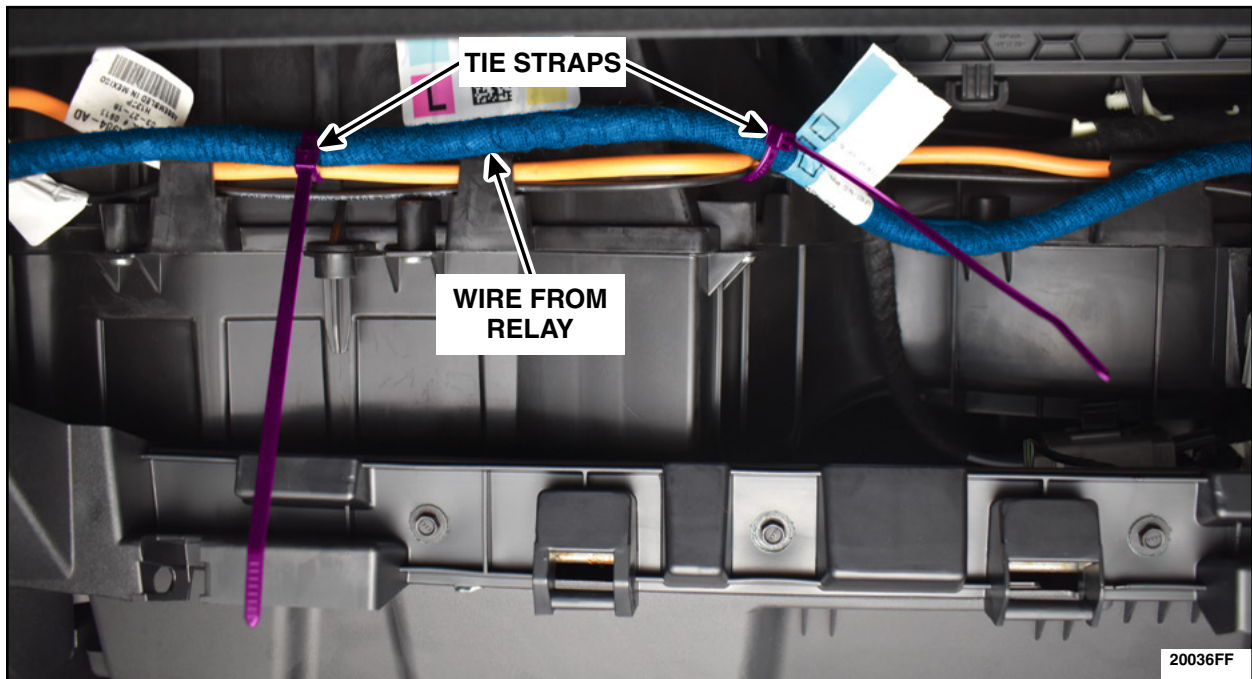
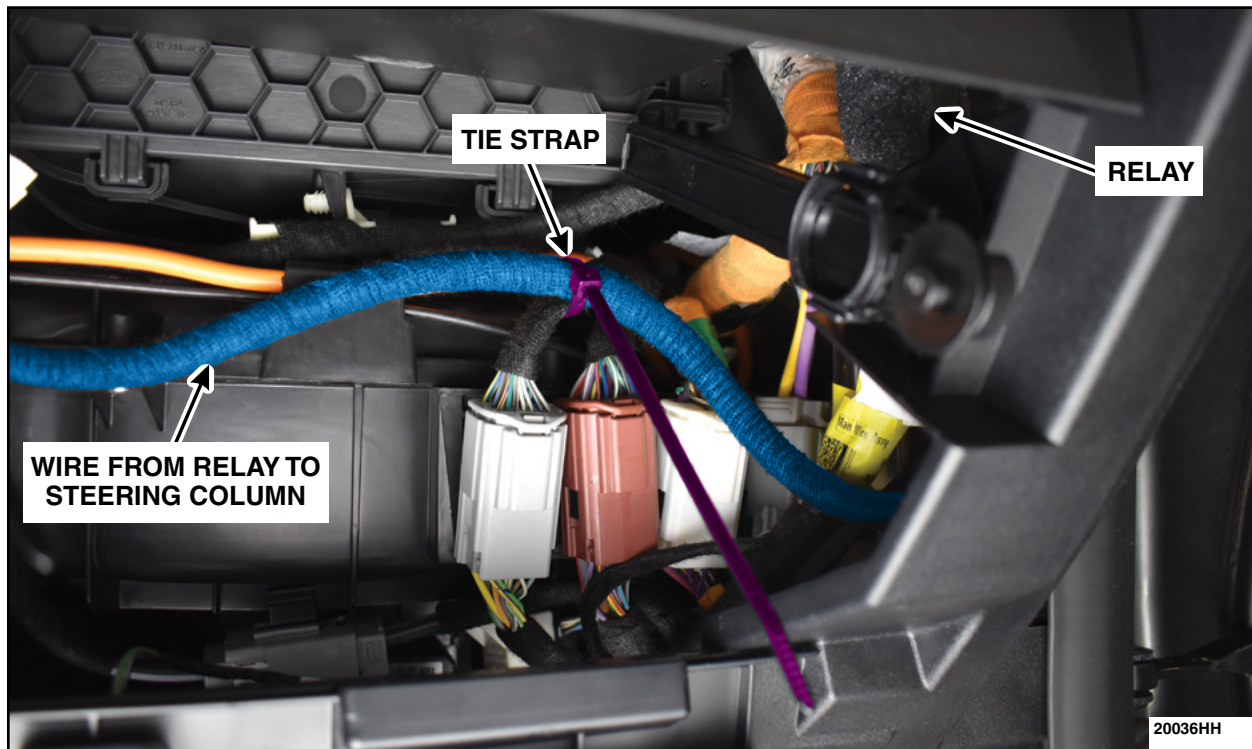


FIGURE 34



53. Secure the wire from the relay to the wiring harness on the climate control housing using a tie strap.  
See Figure 35.



**FIGURE 35**

54. Disconnect C2280A from the BCM. See Figure 36.



**FIGURE 36**





55. Remove the tie strap from C2280A. See Figure 37.

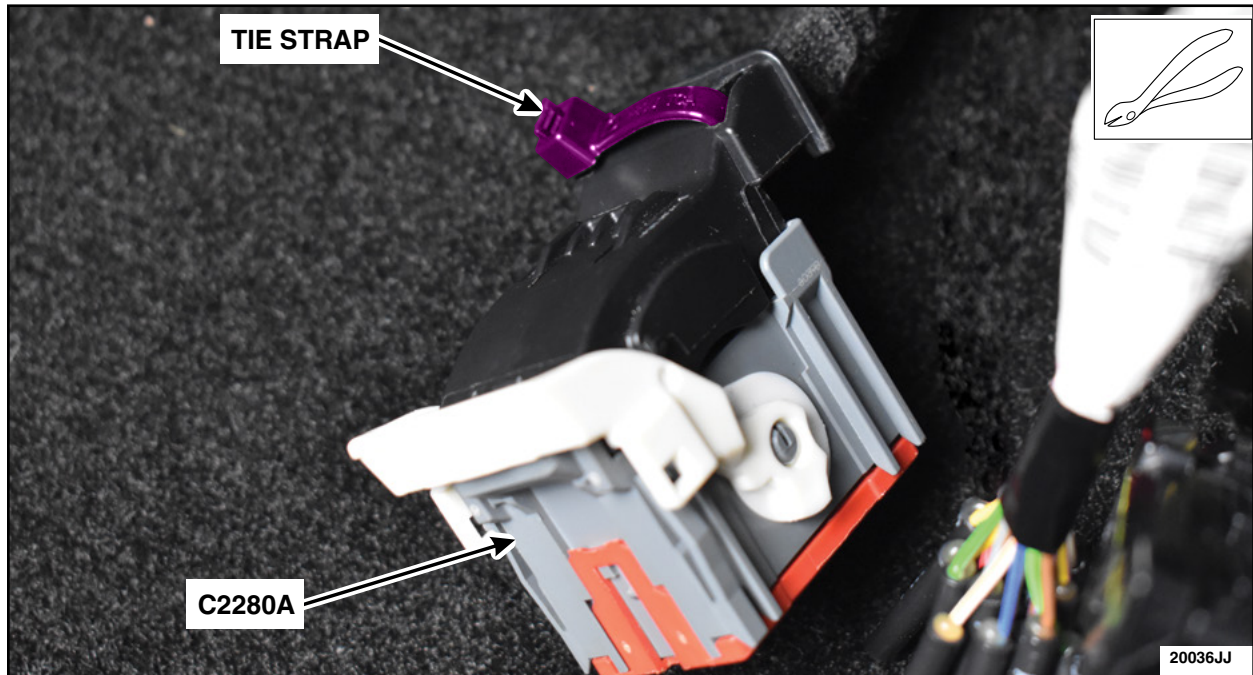


FIGURE 37

56. Remove the red locking tab and the black cover. See Figure 38.

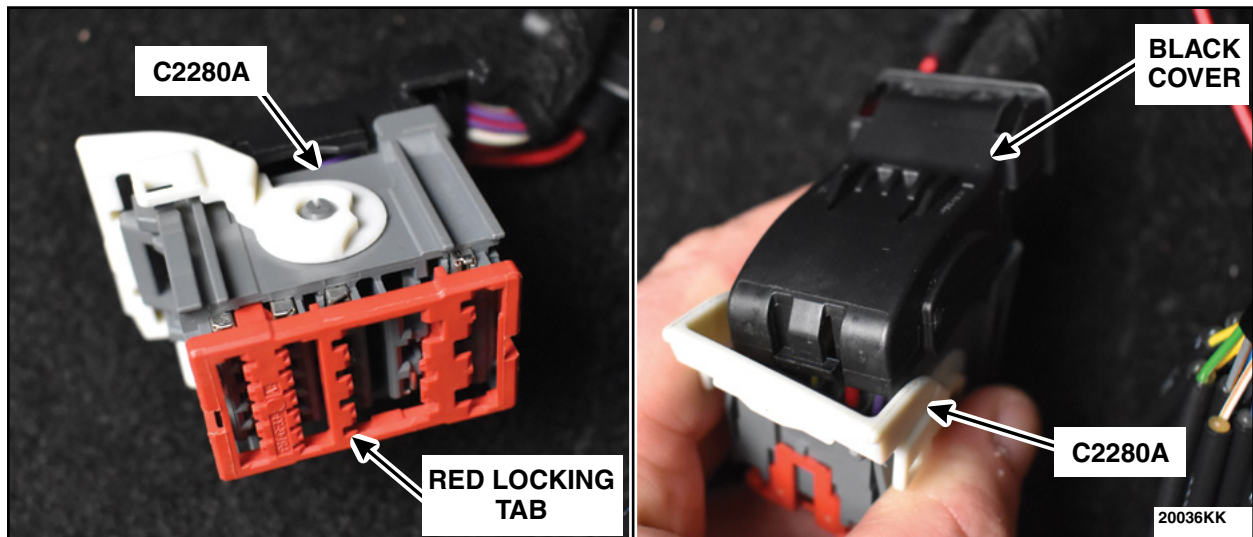
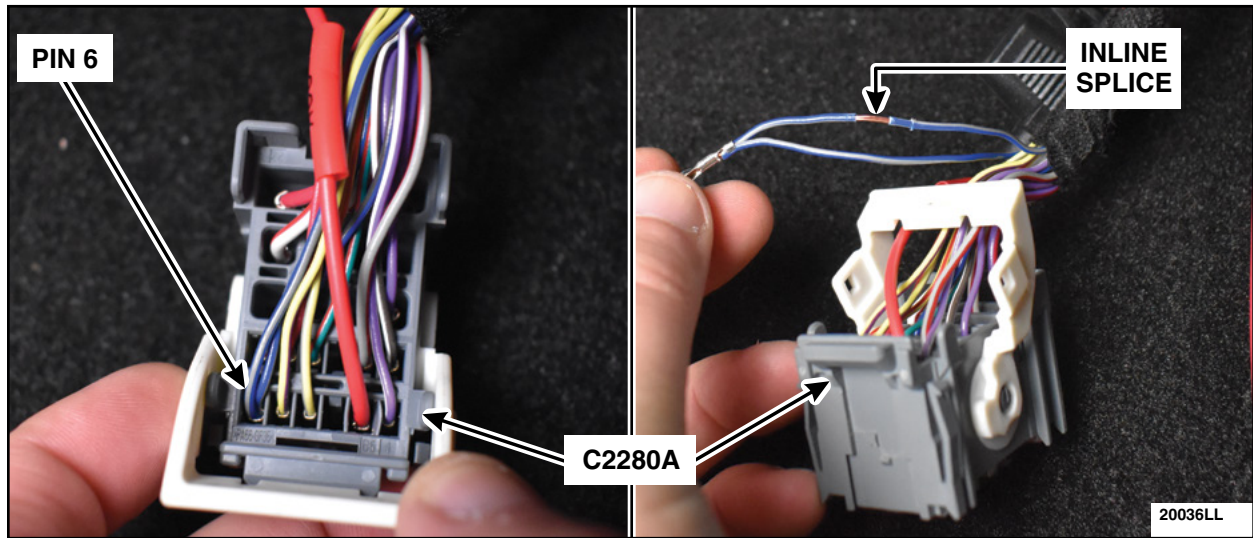


FIGURE 38

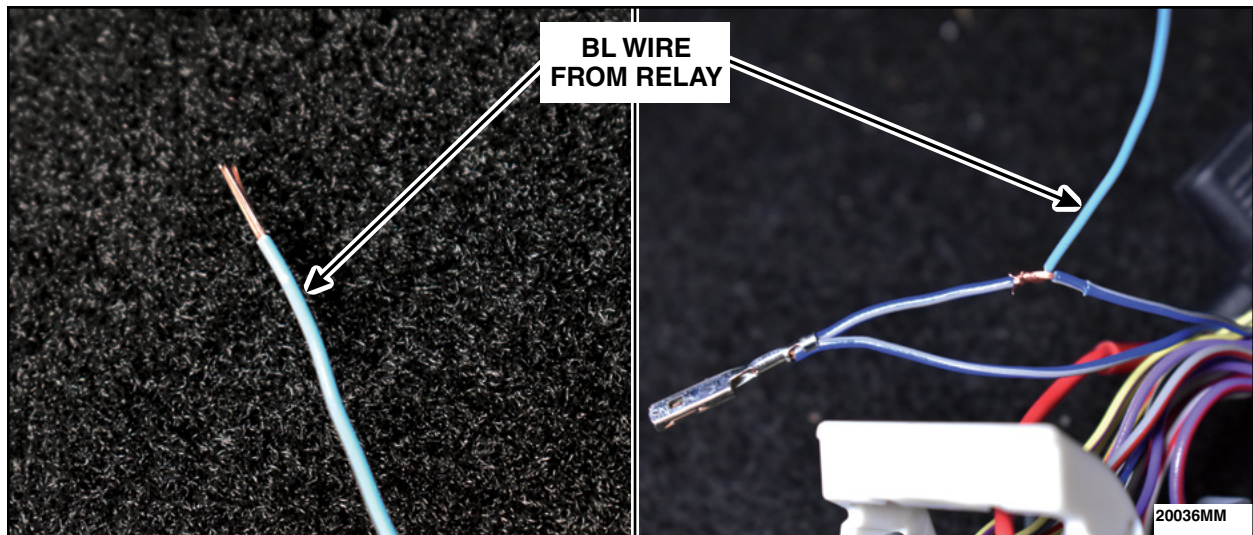


57. Remove the wire from pin 6 and strip back the wire coating to begin an inline splice. See Figure 39.



**FIGURE 39**

58. Strip the tip of the Blue (BL) wire from the relay and twist it into the Blue-White (BL-WT) wire from C2280A pin 6 to create an inline splice. See Figure 40.



**FIGURE 40**





59. Solder the BL wire from the relay to the inline splice, apply heat shrink and heat to seal the inline splice. Reinstall the terminal into pin 6. See Figure 41.

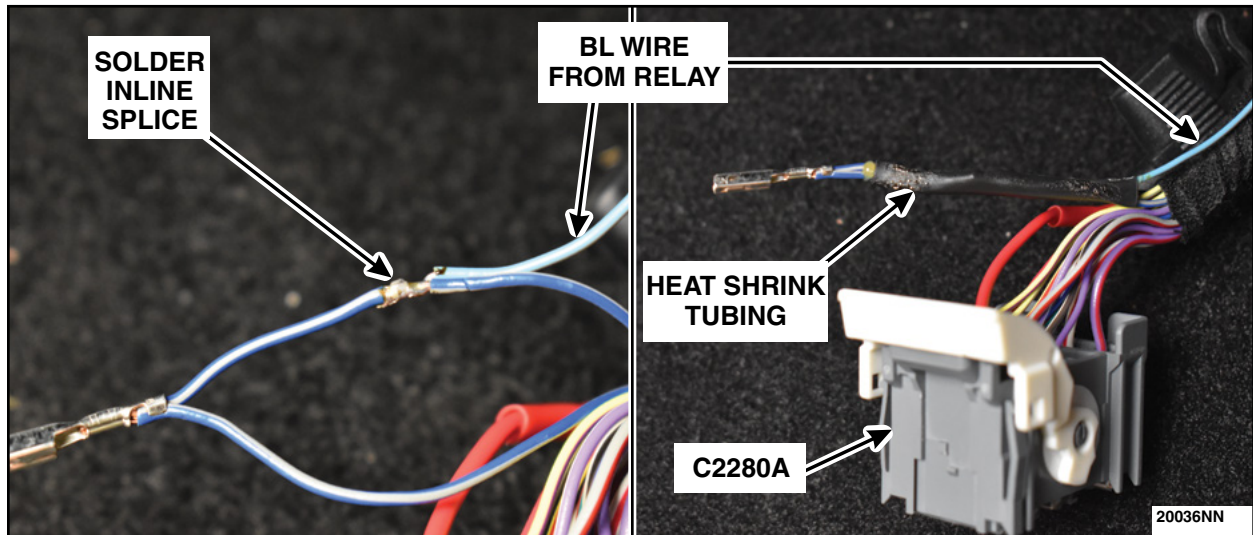


FIGURE 41

60. Install the red locking tab and the black cover. Secure using a tie strap and trim any excess. See Figure 42. Reconnect C2280A to the BCM.

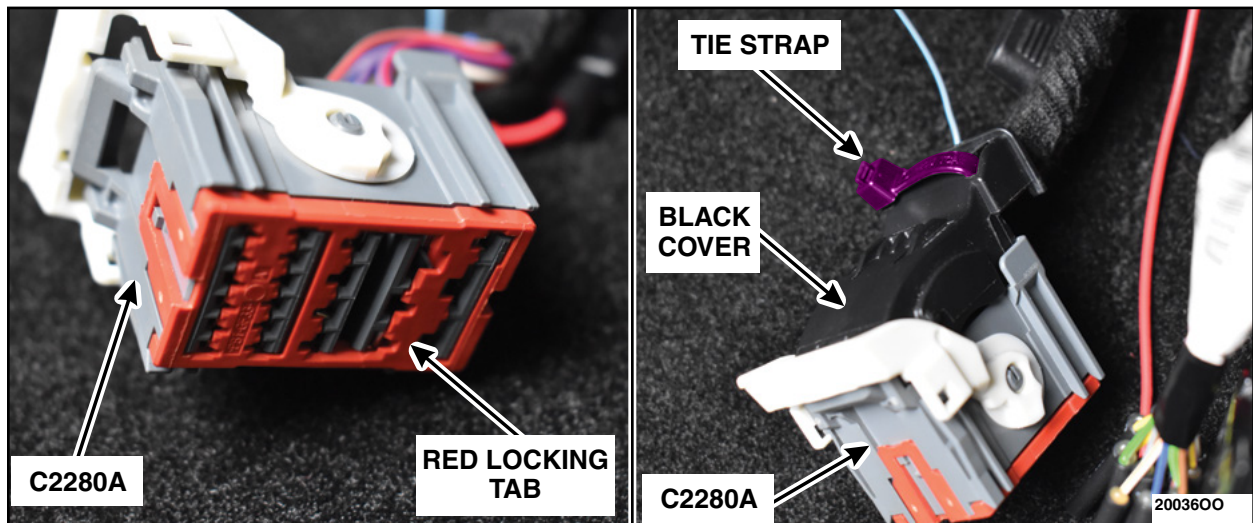



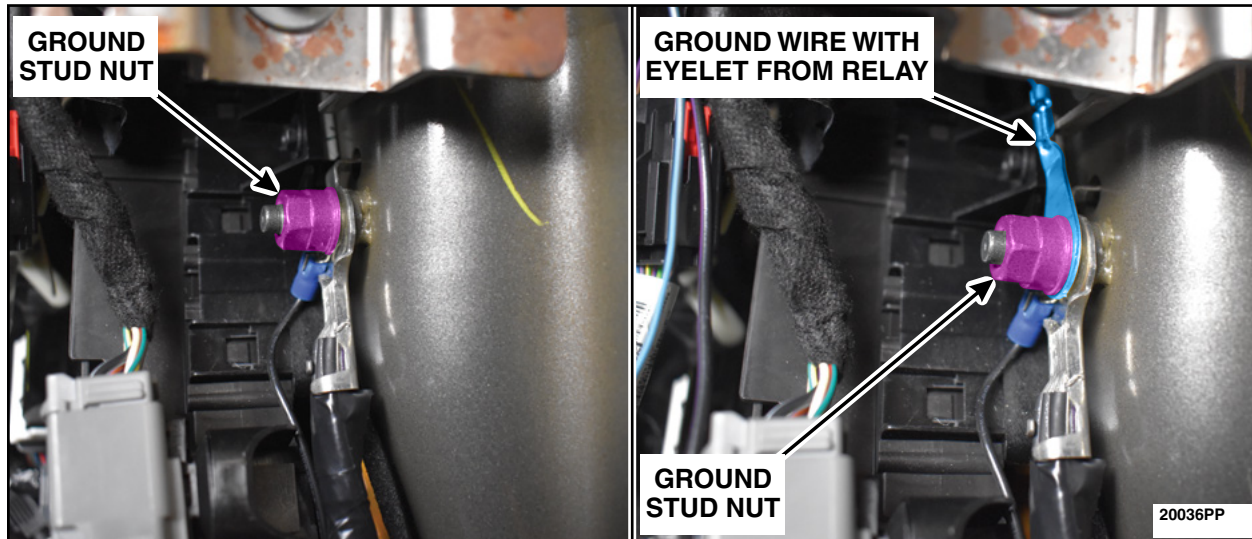
FIGURE 42



 **CAUTION:** Do not over torque the ground stud nut.

61. Remove the ground nut, install the ground wire with the eyelet from the relay on to the ground stud. Reinstall the ground stud nut. See Figure 43.

- Torque: 70 in lb (8 Nm)



**FIGURE 43**



62. Locate and disconnect connector C248 on the BCM. See Figure 44.

- Is the connector grey or black?

**NOTE:** Use the parts chart on Figure 21 Page 13 to verify if you have B1 or B2 version Floor Board Jumper.

Black Connector - **For B1 version Floor Board Jumper:** Cut off and seal with heat shrink tubing the Black-Violet (BK-VT) wire **WITH** the green spot tape on both the relay and the floor board jumper wire. The BK-VT wire **WITHOUT** the green spot tape will be used for this connector. See Figure 45.

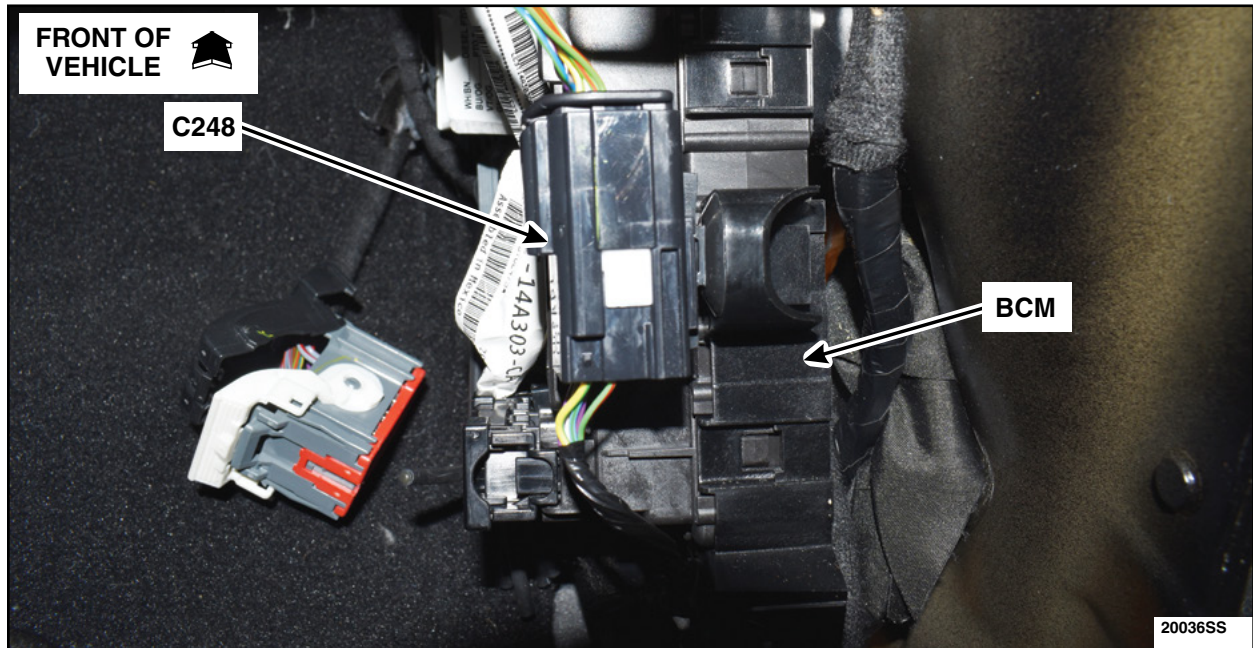
**For B2 version Floor Board Jumper:** Cut off the terminal on the end **WITH** the green spot tape on the floor board jumper wire, on the relay cut off and seal with heat shrink tubing. The BK-VT wire **WITH** the green spot tape the, BK-VT wire **WITHOUT** the green spot tape will be used for this connector. See Figure 45.

Grey Connector - **For B1 version Floor Board Jumper:** Cut off and seal with heat shrink tubing the Black-Violet (BK-VT) wire **WITHOUT** the green spot tape on both the relay and the floor board jumper wire. The BK-VT wire **WITH** the green spot tape will be used for this connector. See Figure 45.

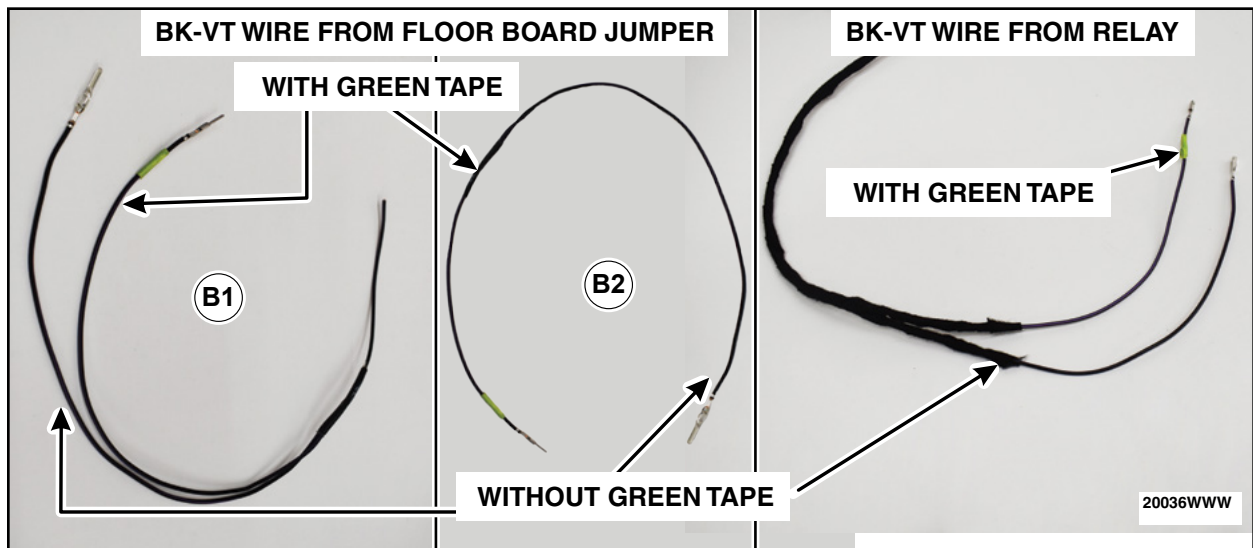
**For B2 version Floor Board Jumper:** Cut off the terminal on the end **WITHOUT** the green spot tape on the floor board jumper wire, on the relay cut off and seal with heat shrink tubing the BK-VT wire **WITHOUT** the green spot tape. The BK-VT wire **WITH** the green spot tape will be used for this connector. See Figure 45.



**NOTE:** Black C248 shown, gray C248 similar.



**FIGURE 44**



**FIGURE 45**





63. Remove the white locking tab from the female end of C248. Install the BK-VT wire from the relay into pin 21 for a black connector and pin 2 for a grey connector. Reinstall the white locking tab. See Figure 46.

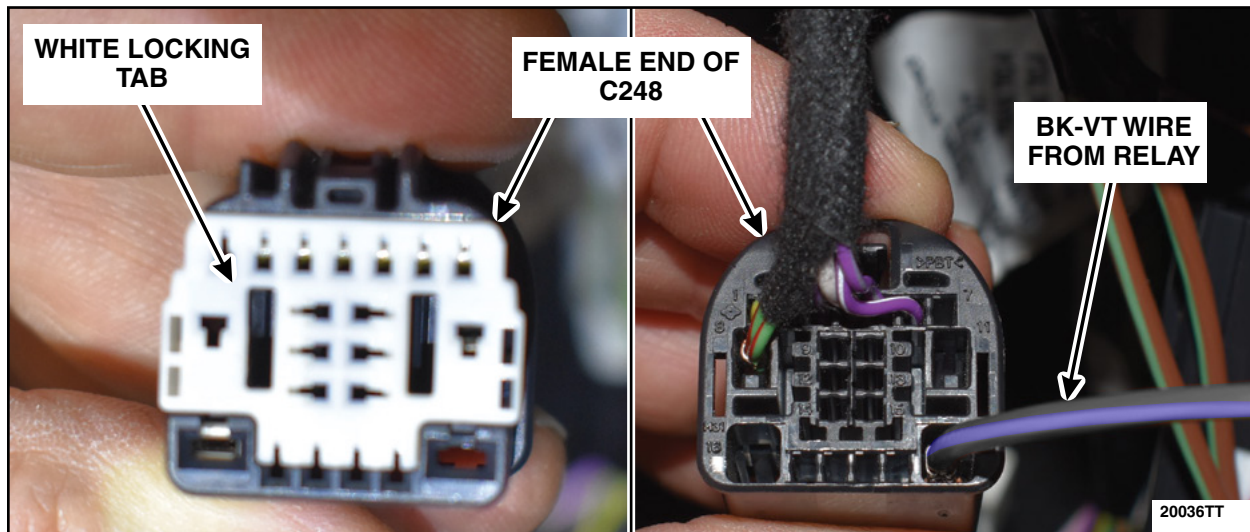


FIGURE 46

64. Detach the male end of C248 from the BCM retainer. Remove the white locking tab and install the BK-VT wire from the relay into Pin 21 for a black connector or pin 2 for a grey connector. Reinstall the white locking tab, attach C248 to the BCM retainer and reconnect C248. See Figure 47.

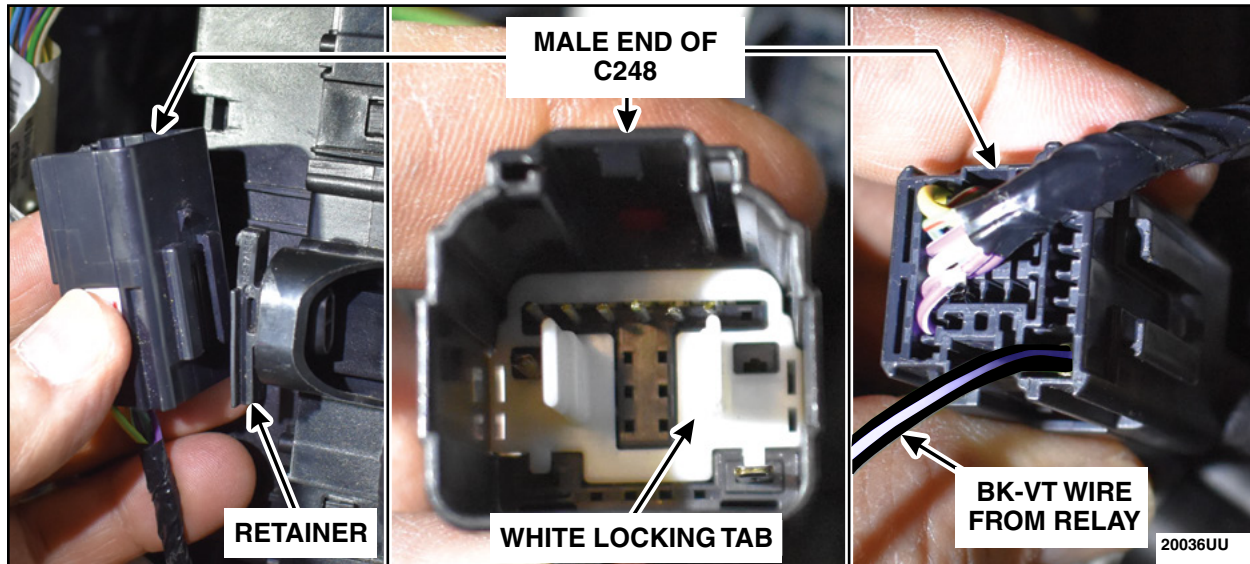


FIGURE 47



65. On the floor of the front passenger side door, cut the wire harness tie strap. Using a Harness Ripper tool or equivalent, carefully open up the harness 75 mm (3 inch) from the front of the wire harness shield to expose the wiring. See Figure 48.

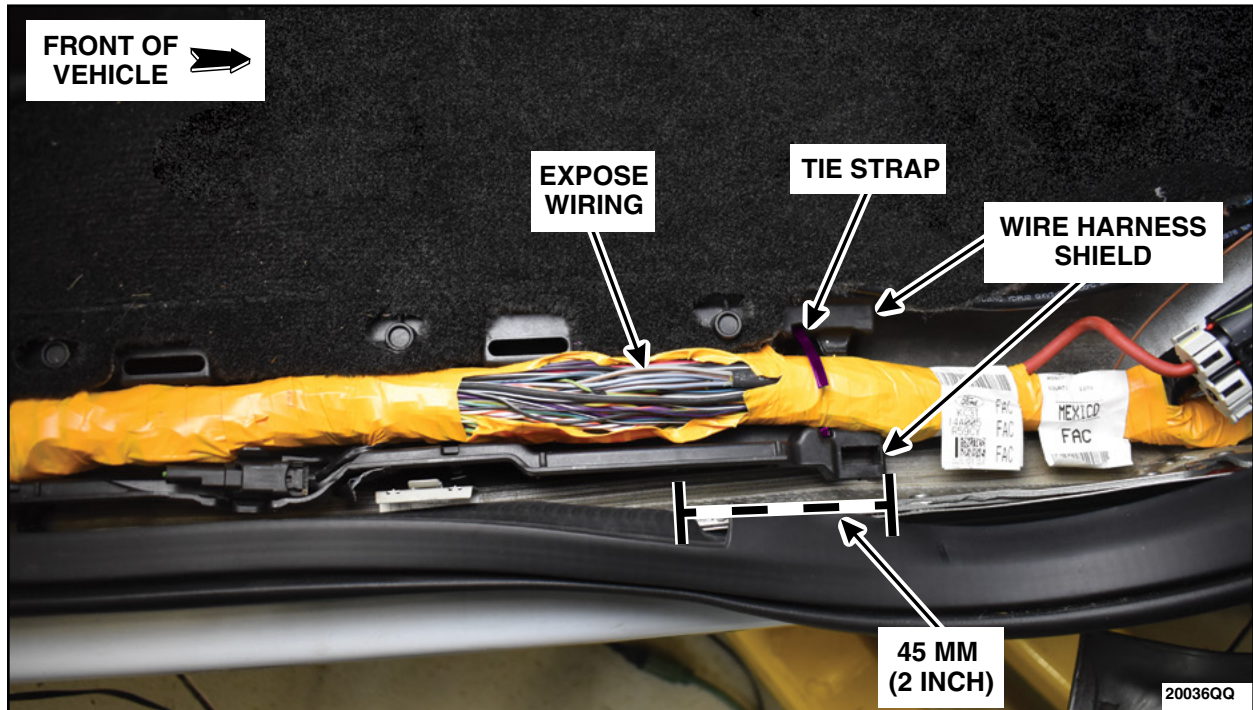


FIGURE 48

66. Position back and connect the negative battery cable(s). Please follow the WSM procedures in Section 414-01.

67. *Locate the wire bundle within the wiring harness. Using a Vernier Caliper tool, measure all the Grey-Brown (GY-BN) wires within the bundle and isolate the 1.5 mm (0.06 inch) wire. This is the largest wire within the bundle. See Figure 49. Cut the 1.5 mm (0.06 inch) wire. Test the vehicles door locks. If the door locks work, the correct wire has been cut. If the door locks do not work, repair the wire and repeat Step 67.*

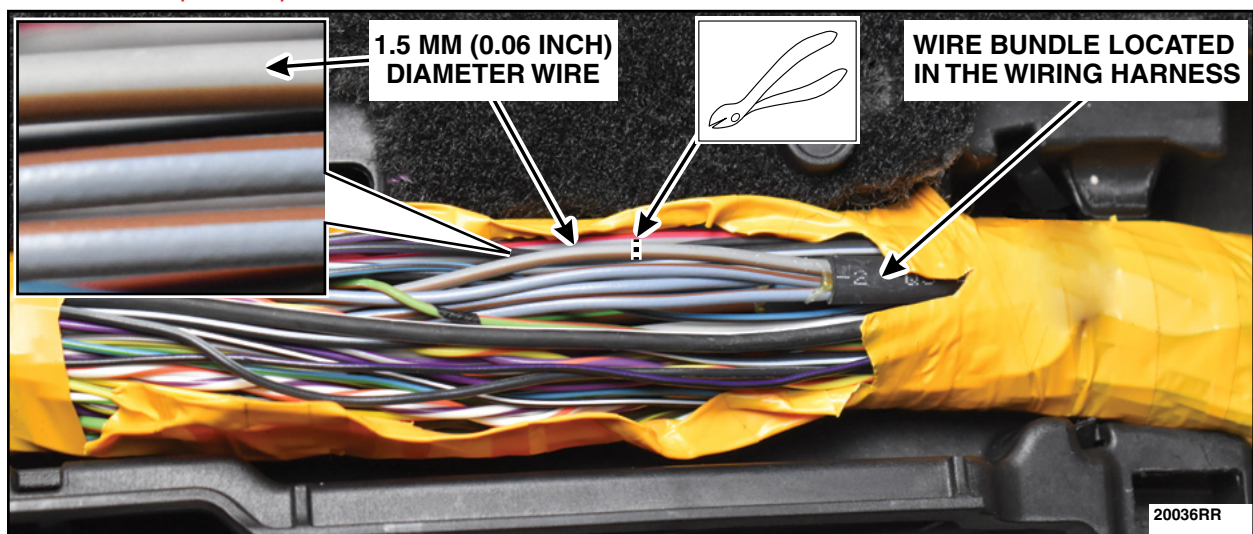
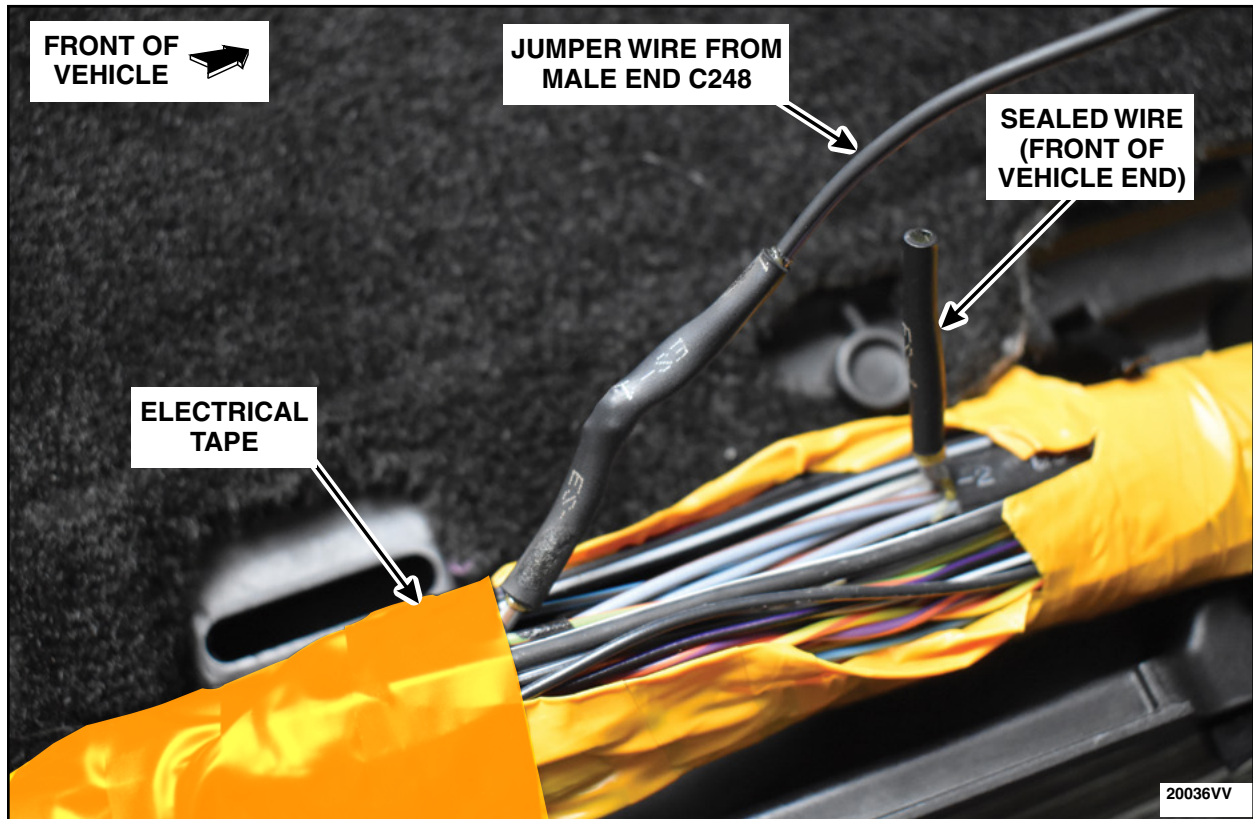


FIGURE 49



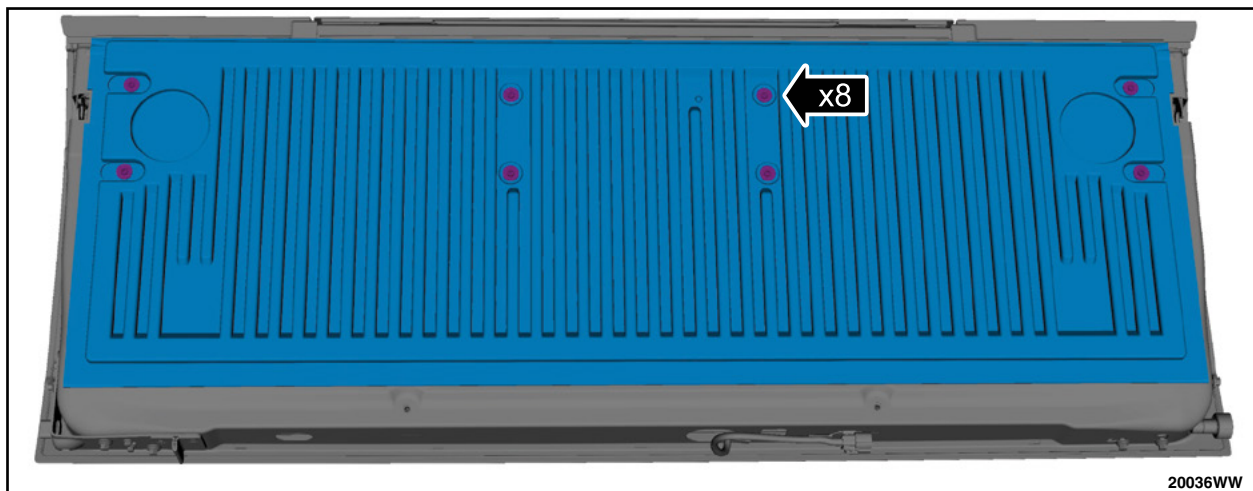


68. Disconnect the negative battery cable(s) and position aside. Please follow the WSM procedures in Section 414-01.
69. Apply heat shrink tubing and seal the front of vehicle end of the cut wire. Strip, solder and seal with heat shrink the jumper wire from C248 to the rear of the vehicle end of the cut wire. See Figure 50. Re-wrap the harness using the appropriate (black or orange) electrical tape.



**FIGURE 50**

70. Reinstall the Glove Compartment. Please follow the WSM procedures in Section 501-12.
71. If equipped, remove the bedliner tailgate cover. See Figure 51.



**FIGURE 51**



72. Remove the tailgate access panel bolts and the tailgate access panel. See Figure 52.

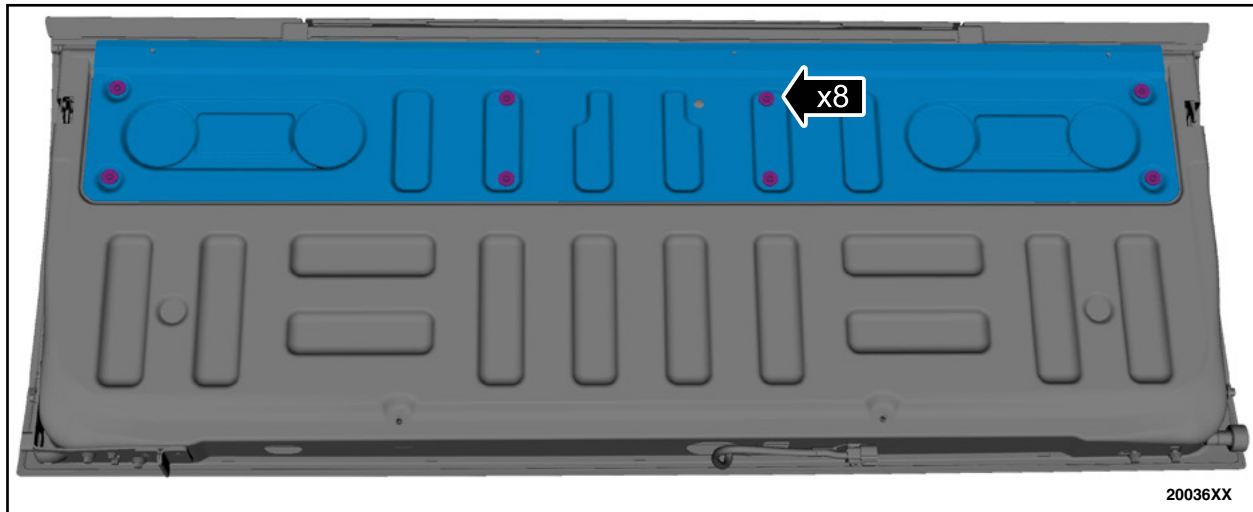


FIGURE 52

73. Remove the tailgate latch control assembly nuts and position the tailgate latch control assembly towards the rear of the vehicle. See Figure 53.

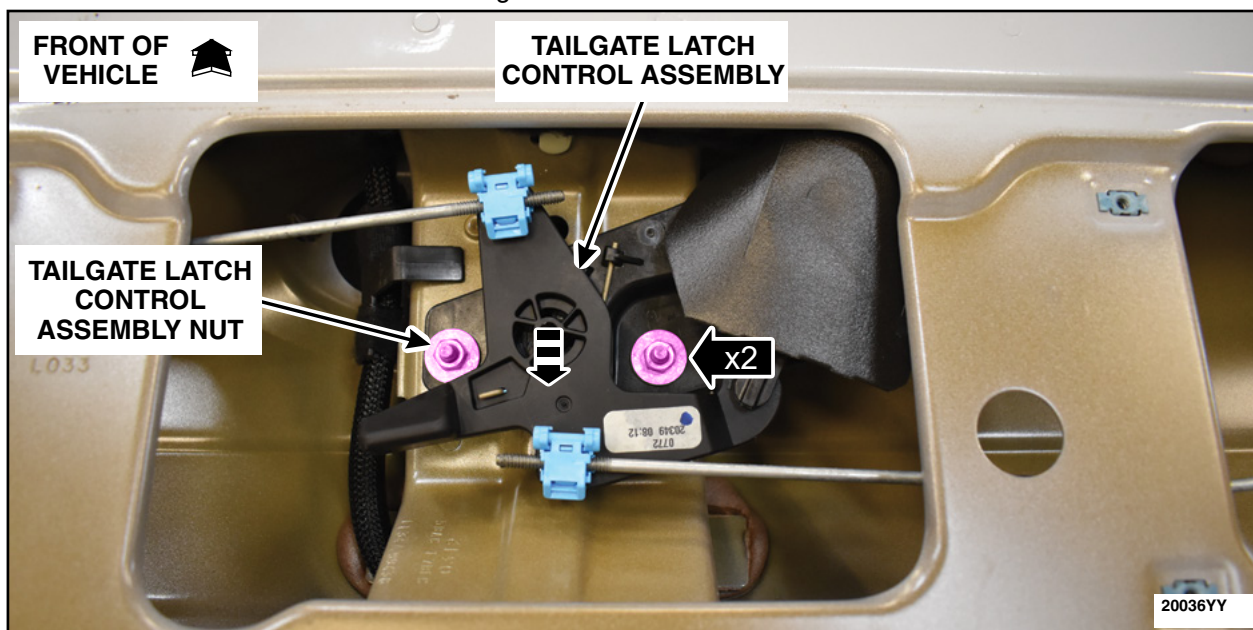
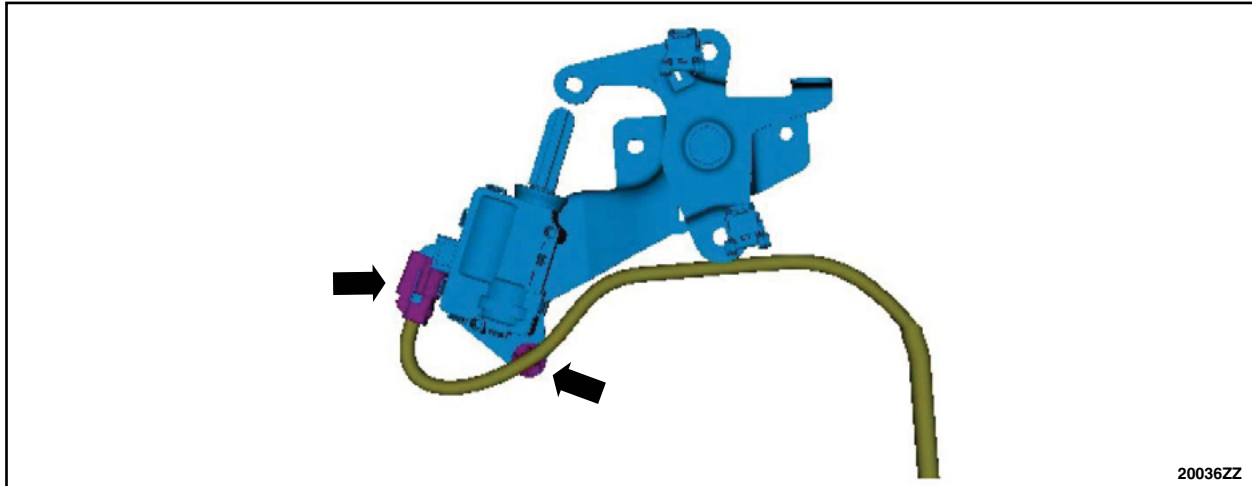


FIGURE 53



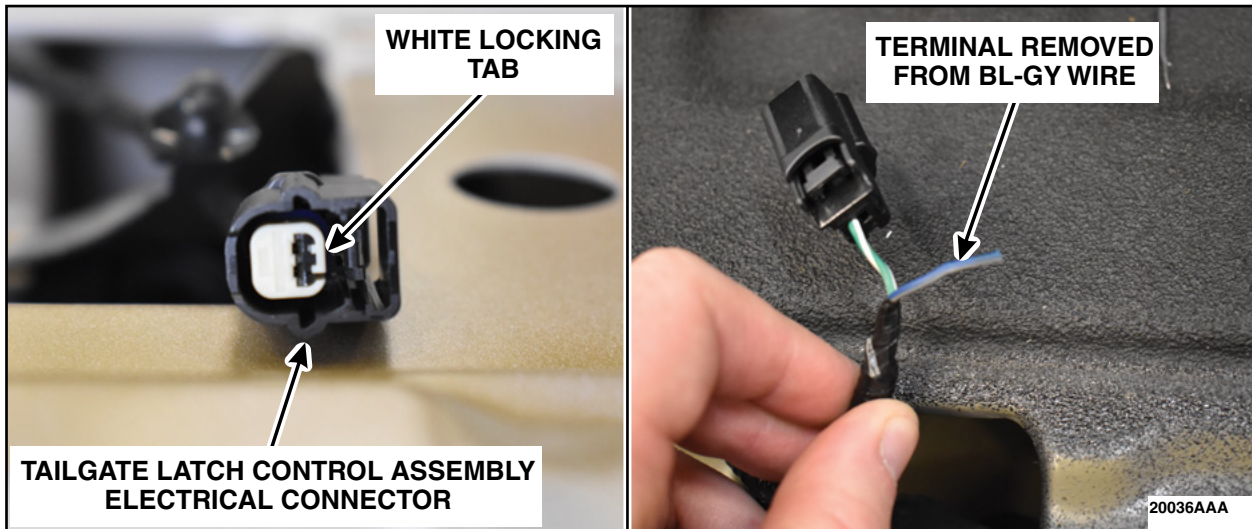
74. Disconnect the electrical connector and the push pin retainer. See Figure 54.

**NOTE:** Tailgate latch control assembly shown outside of the vehicle for clarity.



**FIGURE 54**

75. Remove the white locking tab and the Blue-Grey (BL-GY) wire from the tailgate latch control assembly connector. Cut off the terminal of the BL-GY wire. See Figure 55.



**FIGURE 55**





76. Seal the BL-GY wire using heat shrink tubing. Install the non-sealed end of the BK-VT Tailgate Jumper Harness wire into the tailgate latch control assembly electrical connector. See Figure 56.

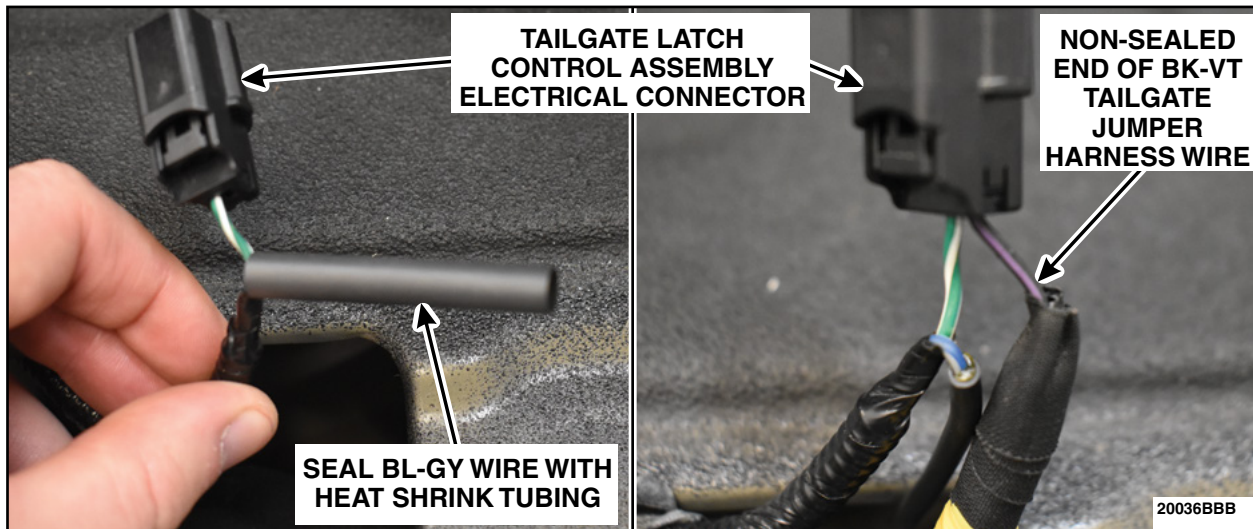


FIGURE 56

77. Bend back the sealed wire and secure using Coroplast® 837 or Equivalent Electrical Wire Harness Tape. Install the white locking tab. See Figure 57.

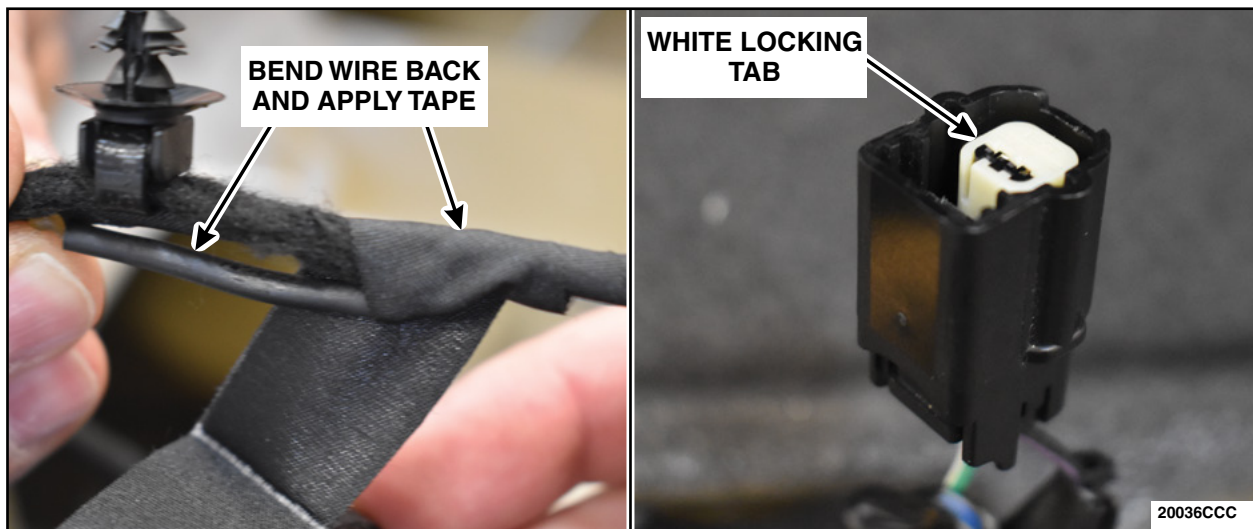


FIGURE 57



78. Apply a piece of Coroplast® 837 or Equivalent Electrical Wire Harness Tape after the push pin retainer to secure the Tailgate Jumper Harness. See Figure 58.

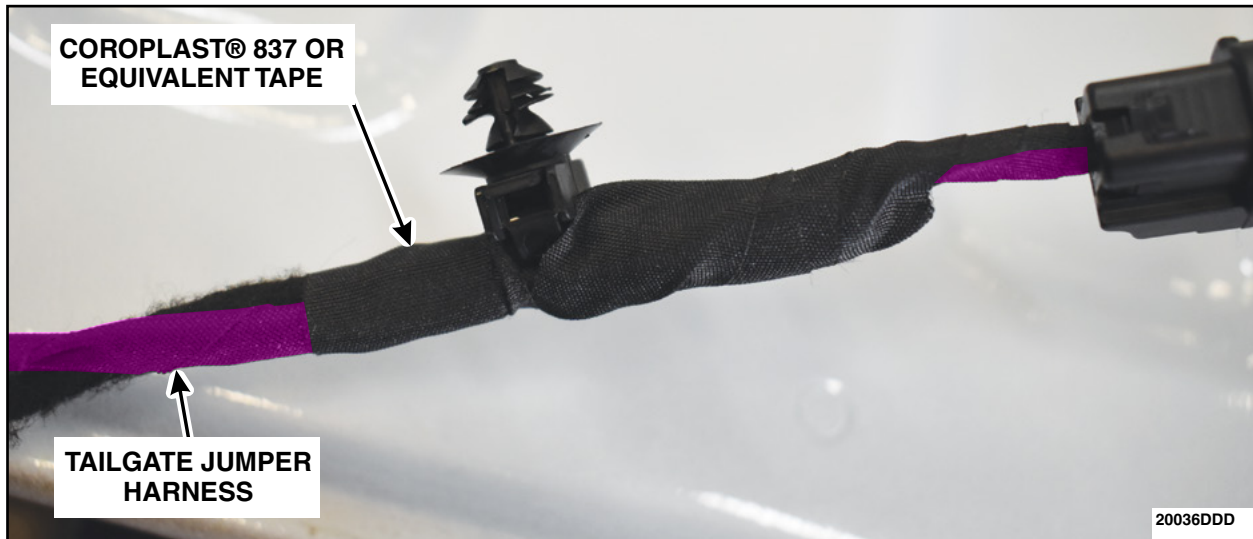


FIGURE 58

79. Reconnect the electrical connector and the push pin retainer. See Figure 59.

**NOTE:** Tailgate latch control assembly shown outside of the vehicle for clarity.

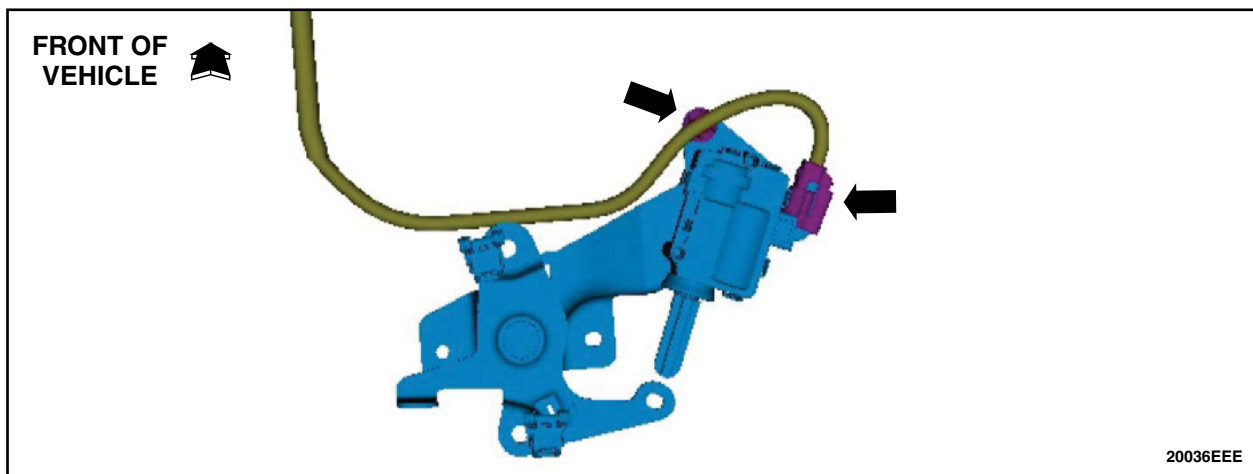


FIGURE 59





80. Using a straightened coat hanger, tape the sealed terminal end of the Tailgate Jumper Harness Wire to one end of the coat hanger. Route the wire and coat hanger on the LH side of the tailgate latch control assembly and through the opening in the center bottom of the tailgate. Continue to pass through the opening in the bed and down through the bottom of the vehicle. See Figure 60.

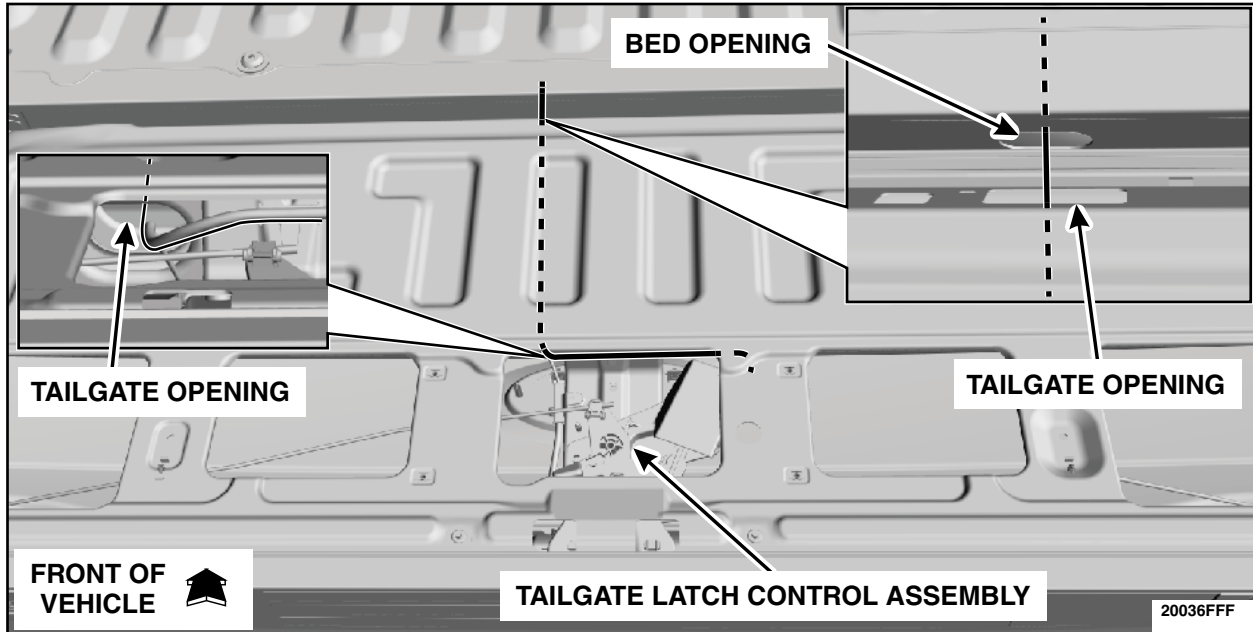


FIGURE 60

81. Secure the Tailgate Jumper Harness using tie straps and trim any tie strap excess length. See Figure 61.

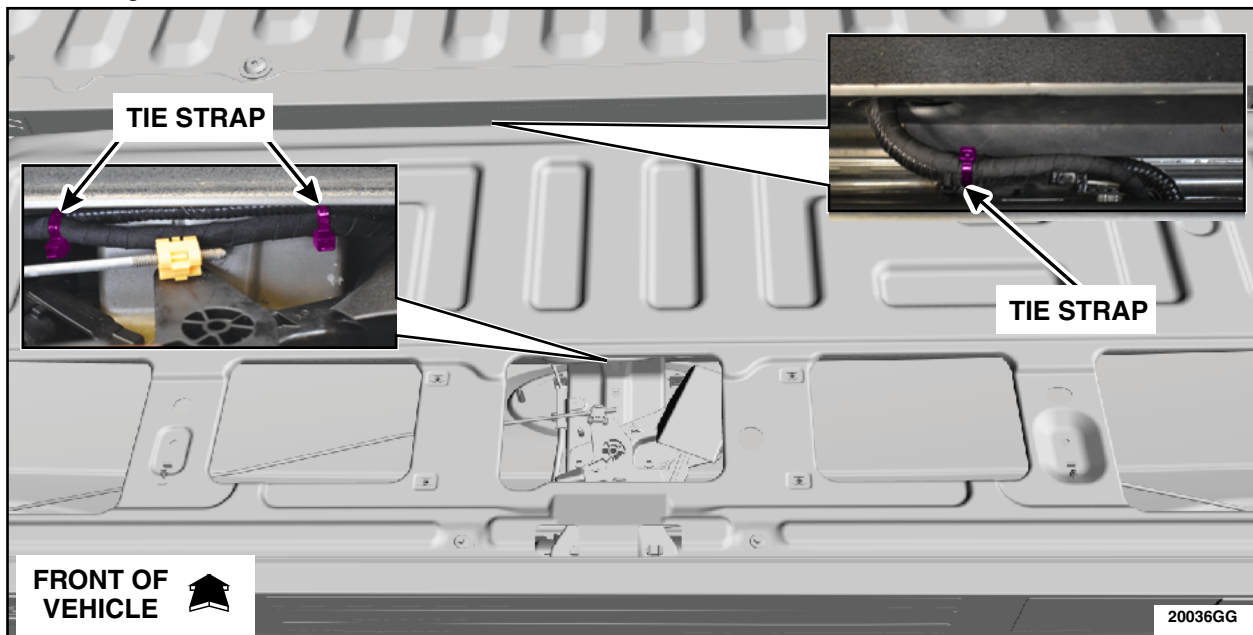
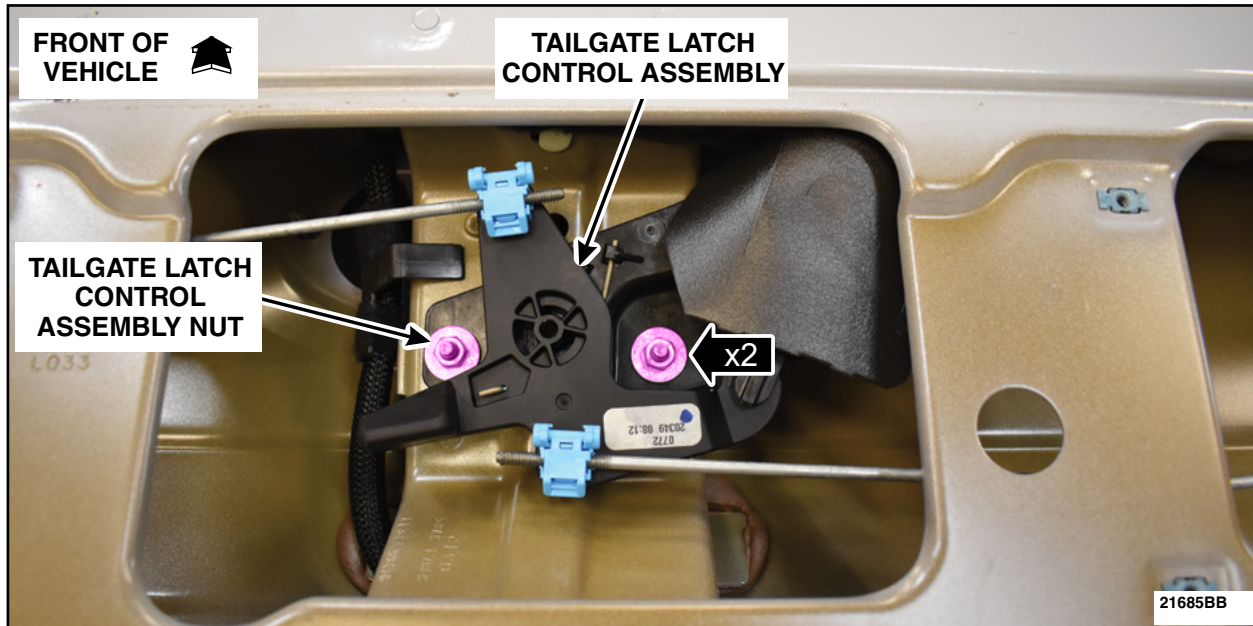


FIGURE 61



82. Position back the tailgate latch control assembly and install the nuts. See Figure 62.

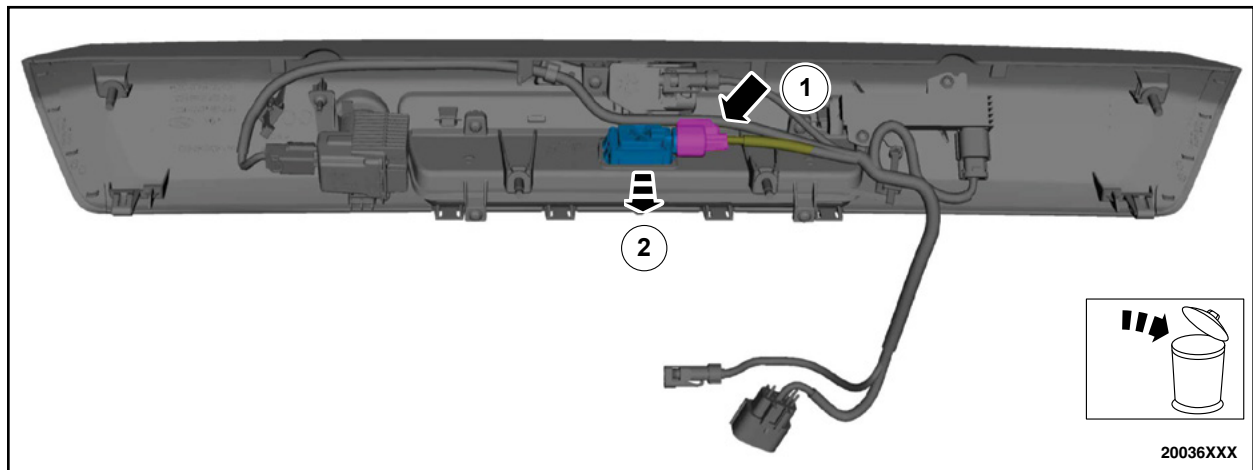
- Torque 80 lb.in (9 Nm)



**FIGURE 62**

83. Remove the Tailgate Release Handle. Please follow the WSM procedures in Section 501-14.

84. Remove and discard the Tailgate Release Switch. See Figure 63.



**FIGURE 63**

85. Install the *new* Tailgate Release Switch by reversing the removal procedure. See Figure 63.

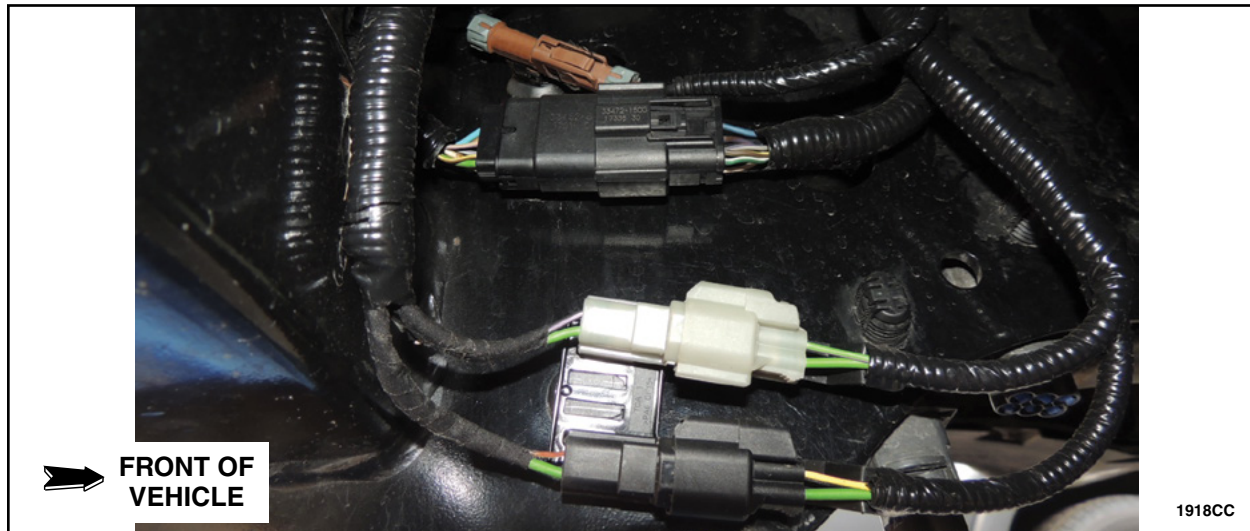
86. Install the Tailgate Release Handle. Please follow the WSM procedures in Section 501-14.

- Camera alignment is not required.



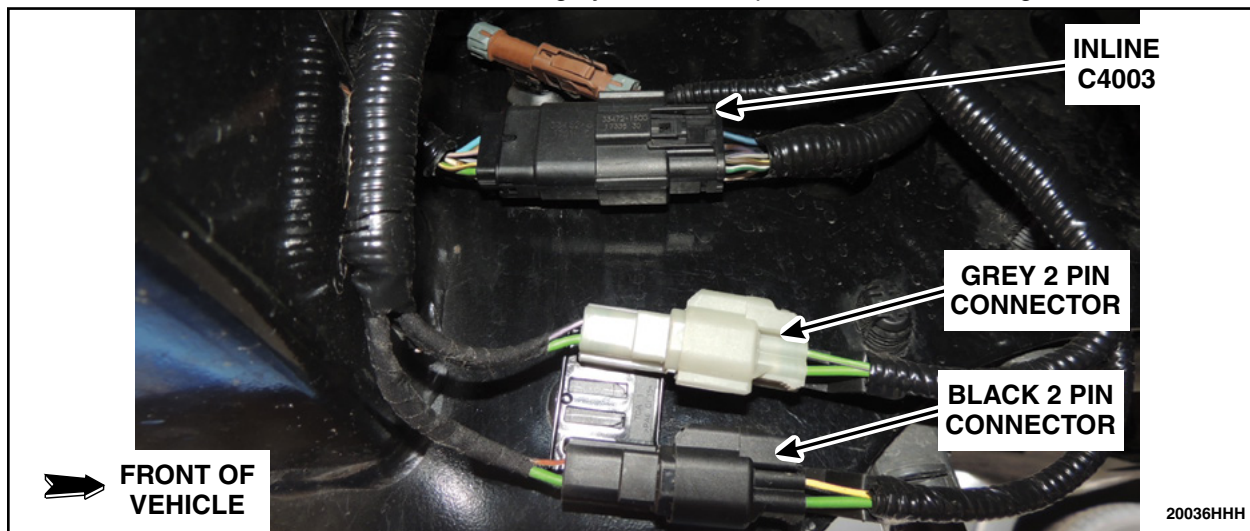
**NOTE:** For 2017-2019 model year vehicles, the Safety Recall 19S48 Tailgate Jumper Harness Kit **MUST** be installed in order to complete this repair. See Figure 64.

**NOTE:** For 2020-2022 model year vehicles, all vehicles are equipped with the Tailgate Jumper Harness Kit from the manufacturer. See Figure 64.



**FIGURE 64**

87. Position the vehicle on a hoist. Please follow the WSM procedures in Section 100-02.
88. Using the vehicle spare tire rod, lower the spare tire and secure it out of the way using a ratchet strap or other similar device.
89. Disconnect the black inline C4003 and the grey and black 2 pin connectors. See Figure 65.



**FIGURE 65**





90. Remove the tape and convolute of the female side of the Grey 2 pin connector to expose the end of the dummy wire located in Pin 2. See Figure 66.

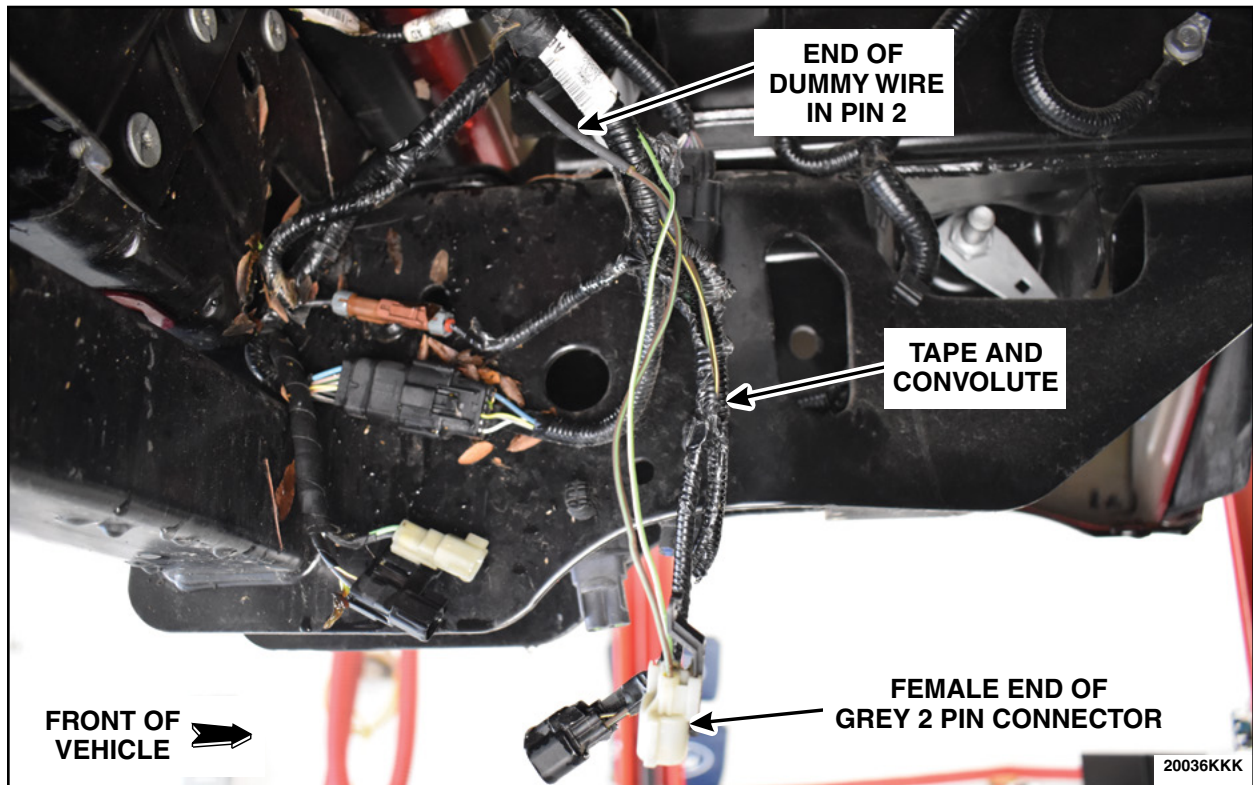


FIGURE 66



91. On the female end of the Grey 2 pin connector, cut the end of the dummy wire in Pin 2 halfway between the heat shrink and the connector. Cut off the sealed terminal on the Tailgate Jumper Harness. See Figure 67.

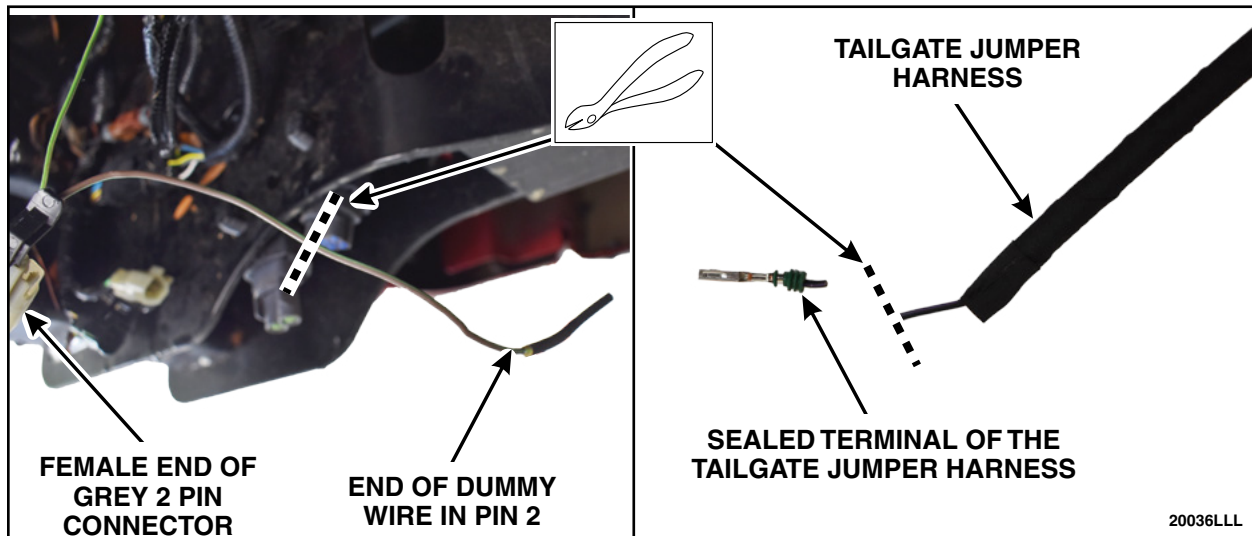


FIGURE 67

92. Solder and heat shrink the Tailgate Jumper Harness to the dummy wire in Pin 2 of the grey 2 pin female end connector. See Figure 68.

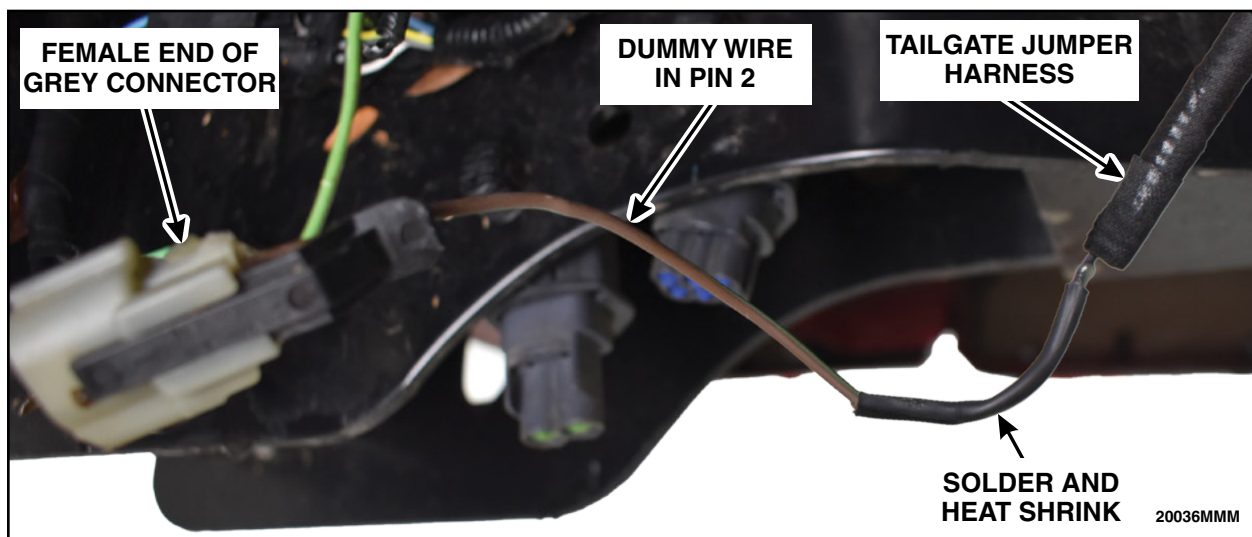


FIGURE 68





93. Remove 76 mm (3 in) of tape and convolute of the male end of C4003 to expose the wiring. Locate the Grey-Brown (GY-BN) wire in C4003 (pin 10). See Figure 69.

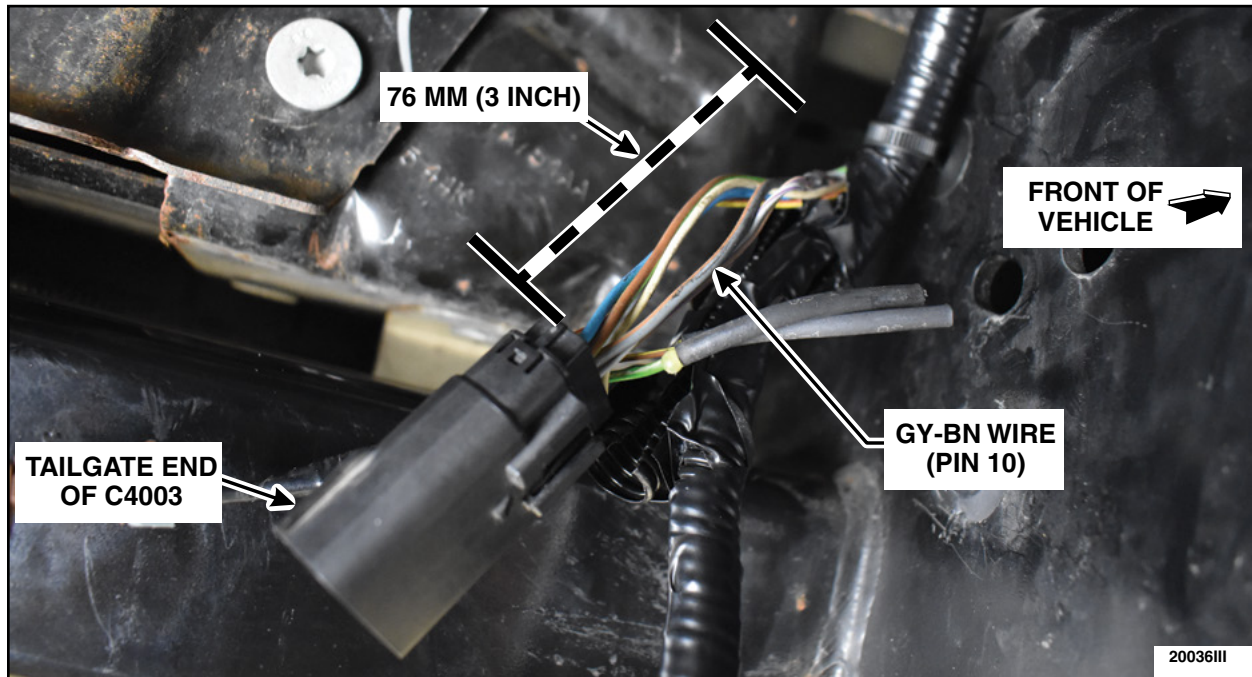


FIGURE 69

94. Cut the GY-BN wire and seal the connector end of the wire using heat shrink tubing. Solder in the GY-BN jumper wire into the harness end of the cut wire. Seal using heat shrink tubing. See Figure 70.

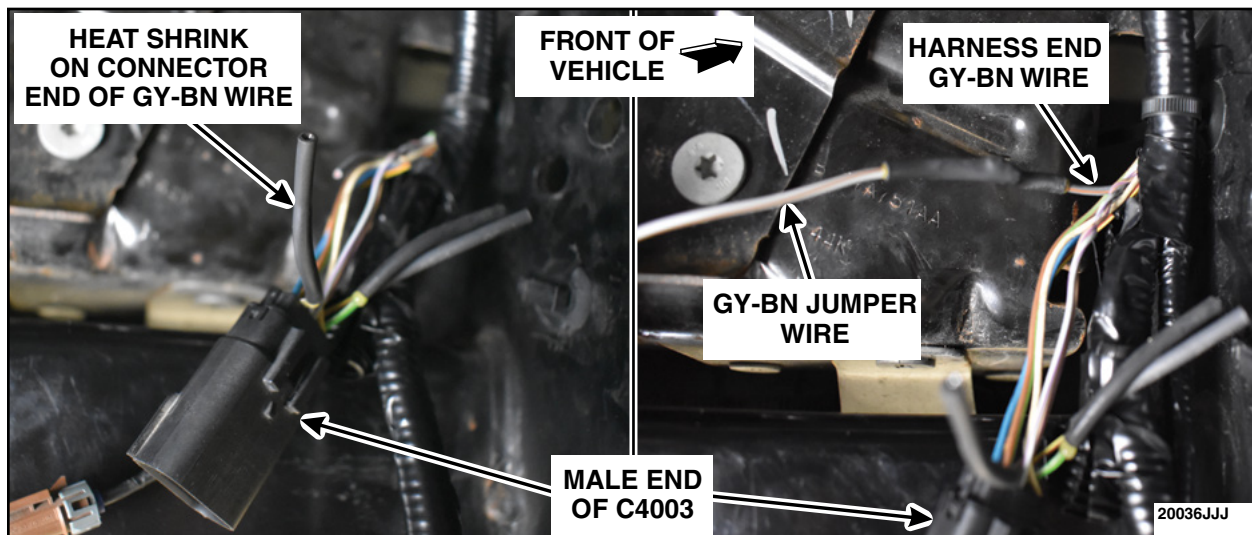


FIGURE 70



95. Remove the tape and convolute on the male end of the Grey connector to expose the GY-BN dummy wire. Cut the GY-BN wire just in front of the heat shrink tubing and discard the heat shrink tubing. See Figure 71.

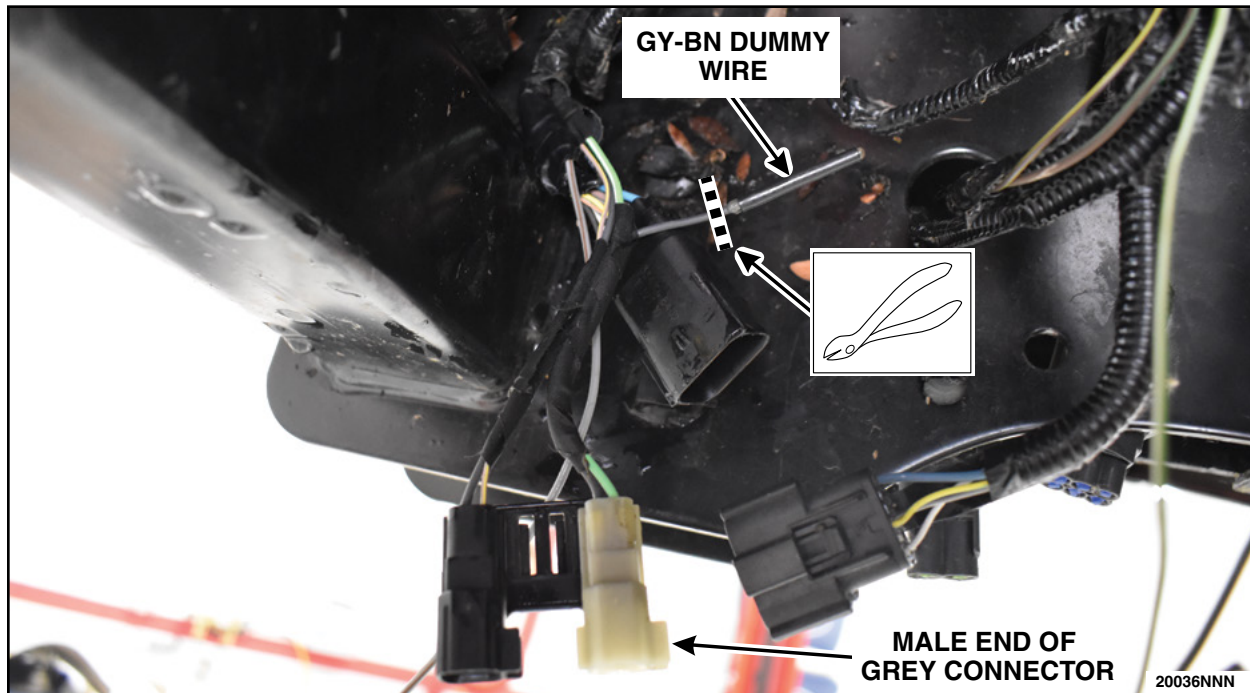


FIGURE 71

96. Apply heat shrink tubing to the GY-BN wire from C4003. Solder the GY-BN wire from C4003 to the GY-BN wire of the male end Grey connector. See Figure 72.

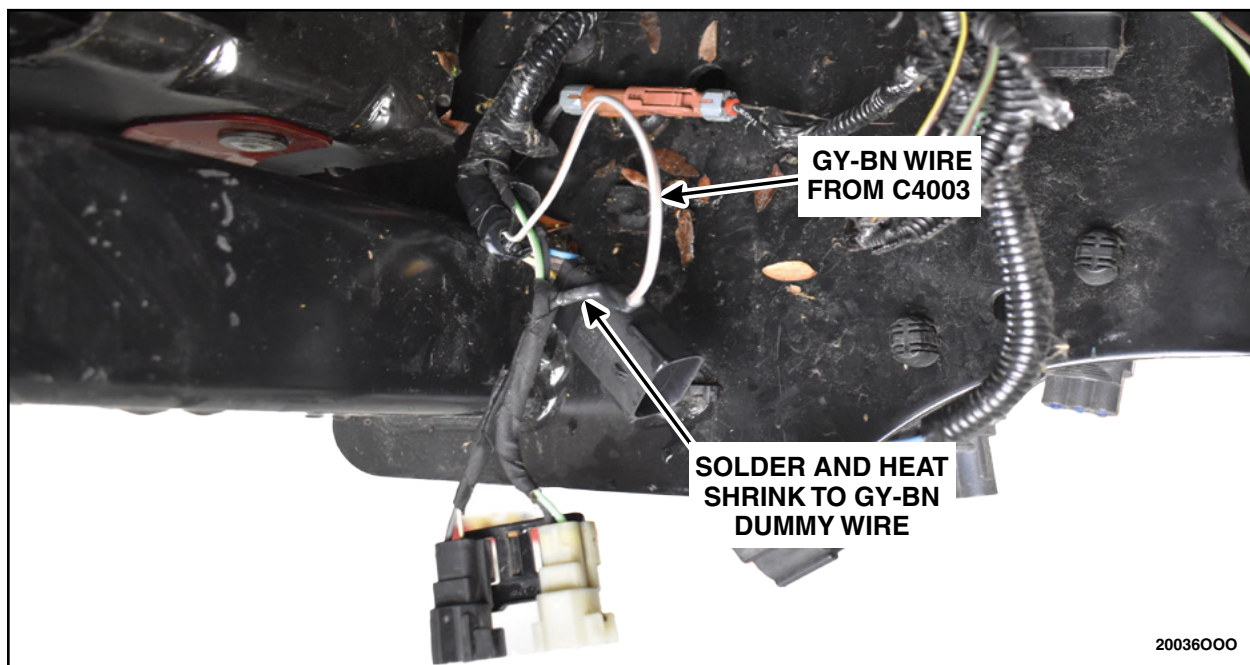


FIGURE 72





97. Position back the convolute and wrap any exposed wires on the harness with black electrical tape.  
See Figure 73.



FIGURE 73

98. Secure the tailgate jumper harness using a tie strap then cut the excess length of the tie strap. Return the connectors into the proper locations. See Figures 74 and 75.

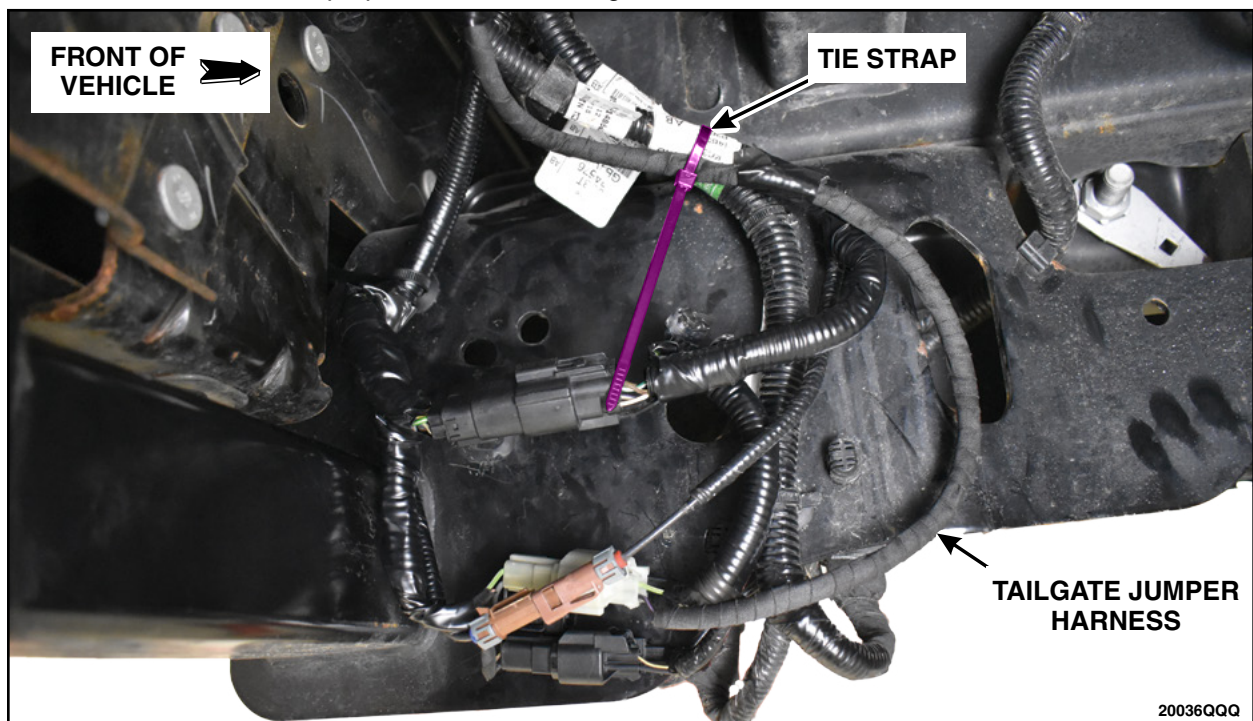


FIGURE 74



Completed Wiring Modification

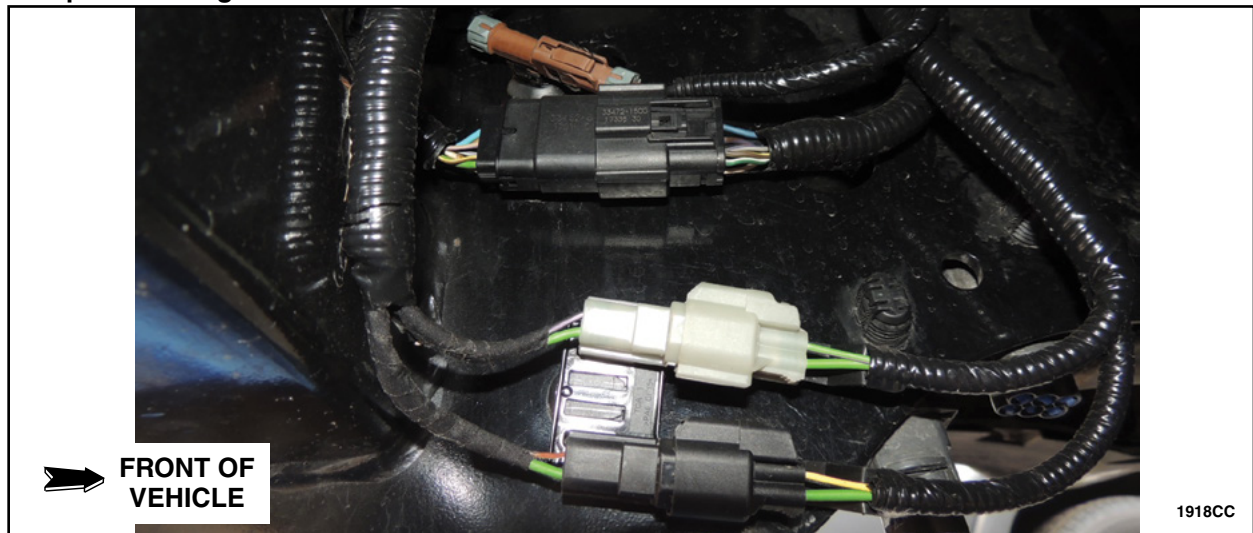


FIGURE 75

99. Remove the ratchet strap and raise the spare tire and replace the spare tire rod inside the vehicle.

100. Install the lower steering column shroud and the bolts. See Figure 76.

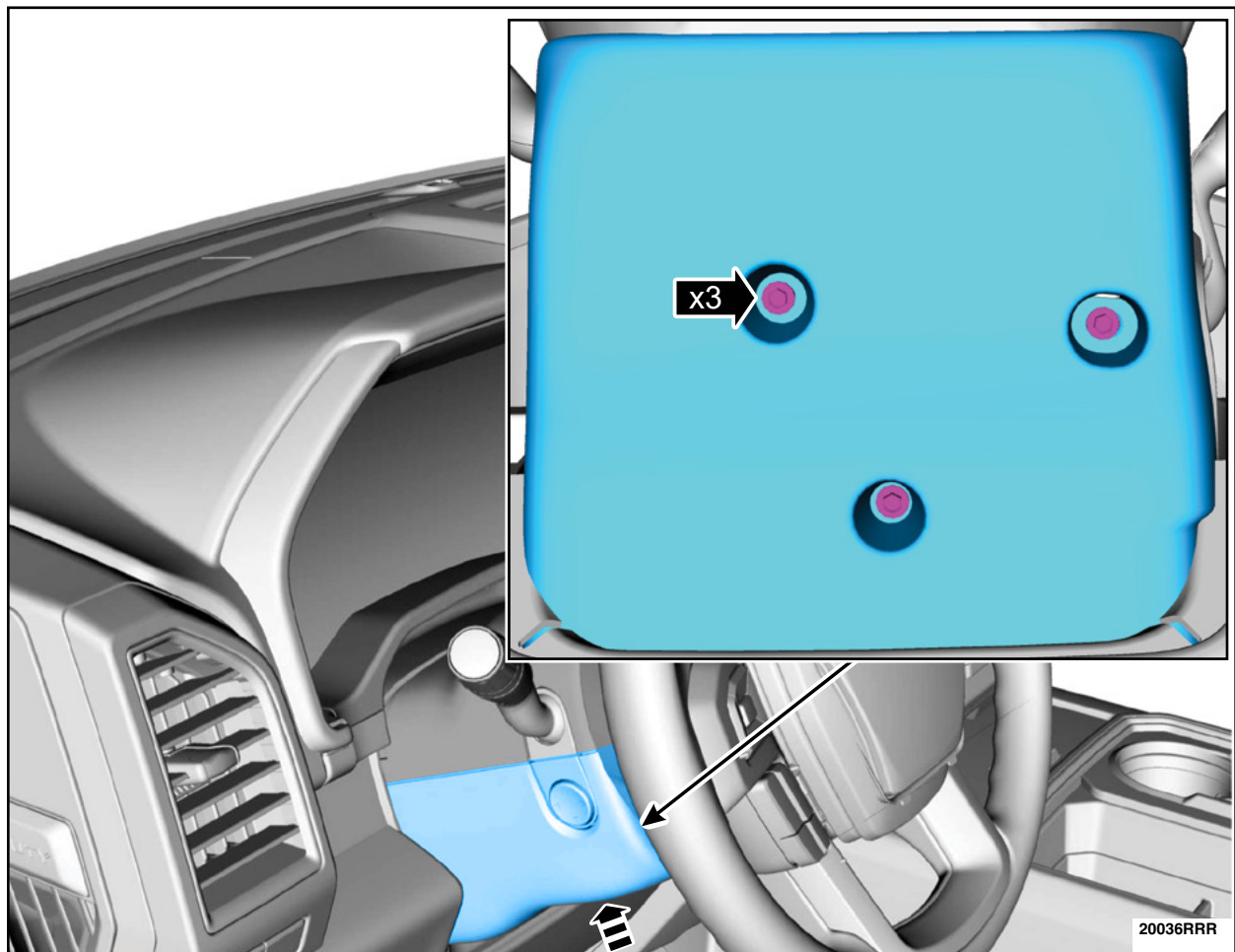
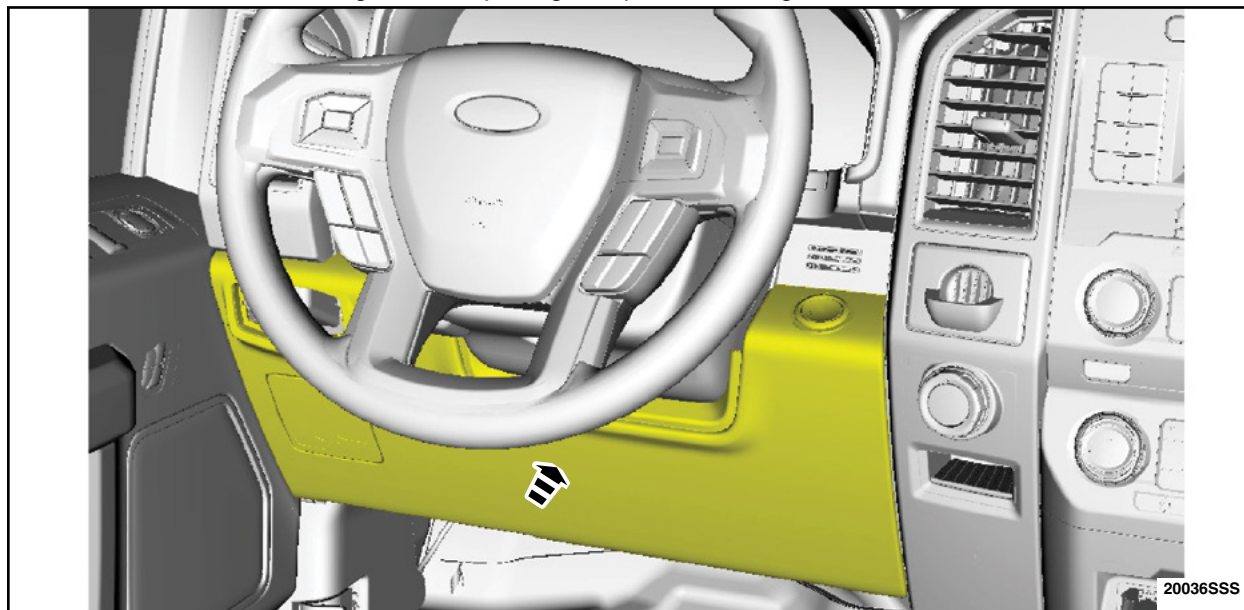


FIGURE 76



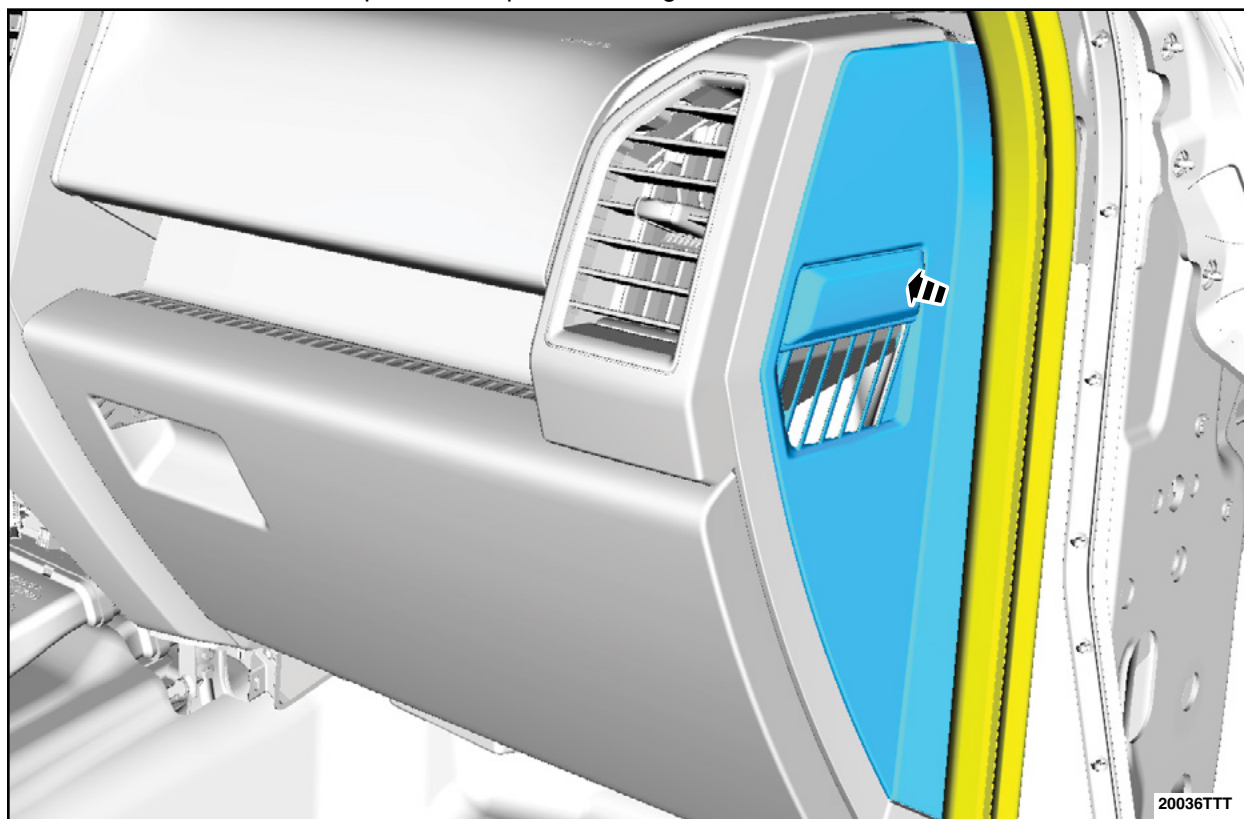


101. Position back the steering column opening trim panel. See Figure 77.



**FIGURE 77**

102. Install the RH instrument panel finish panel. See Figure 78.



**FIGURE 78**



103. Install the RH lower cowl trim panel and the access cover. Position back the weatherstrip.  
See Figure 79.

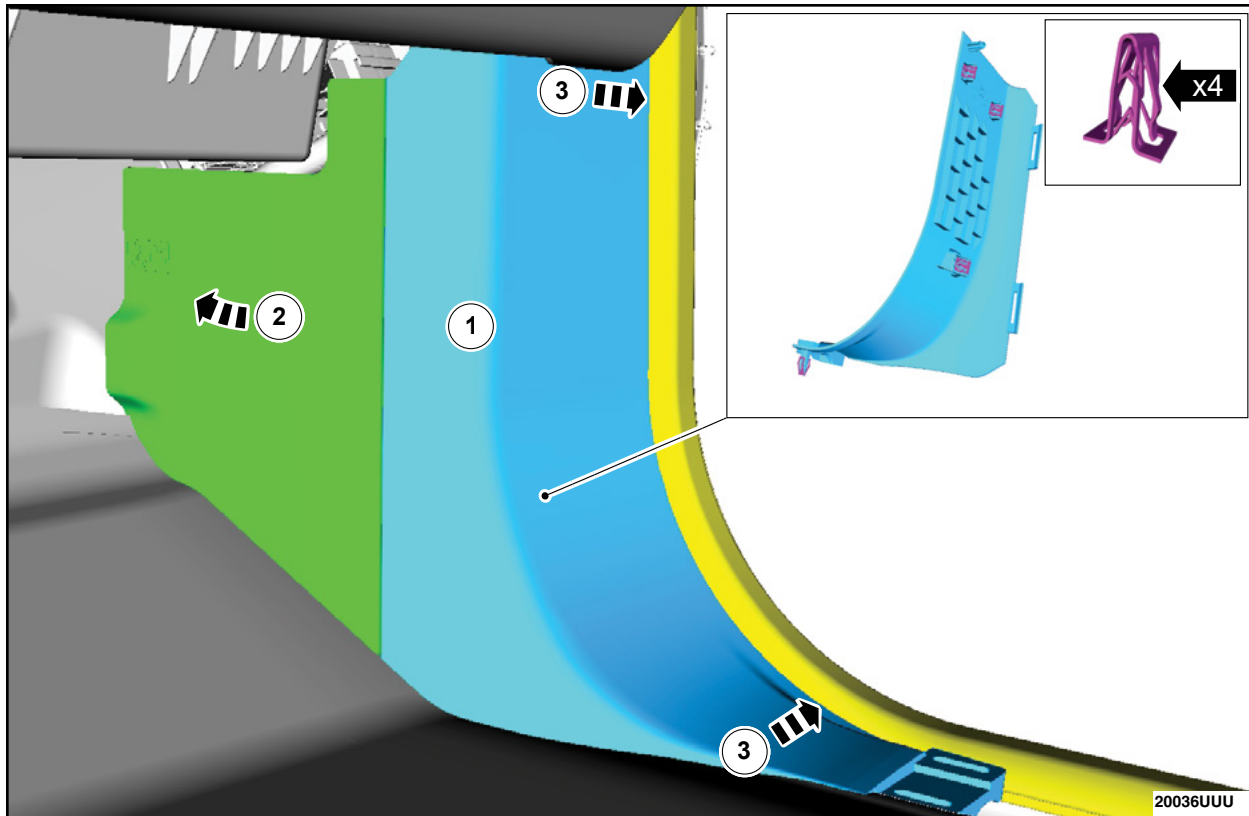


FIGURE 79

104. Install the RH scuff plate. See Figure 80.

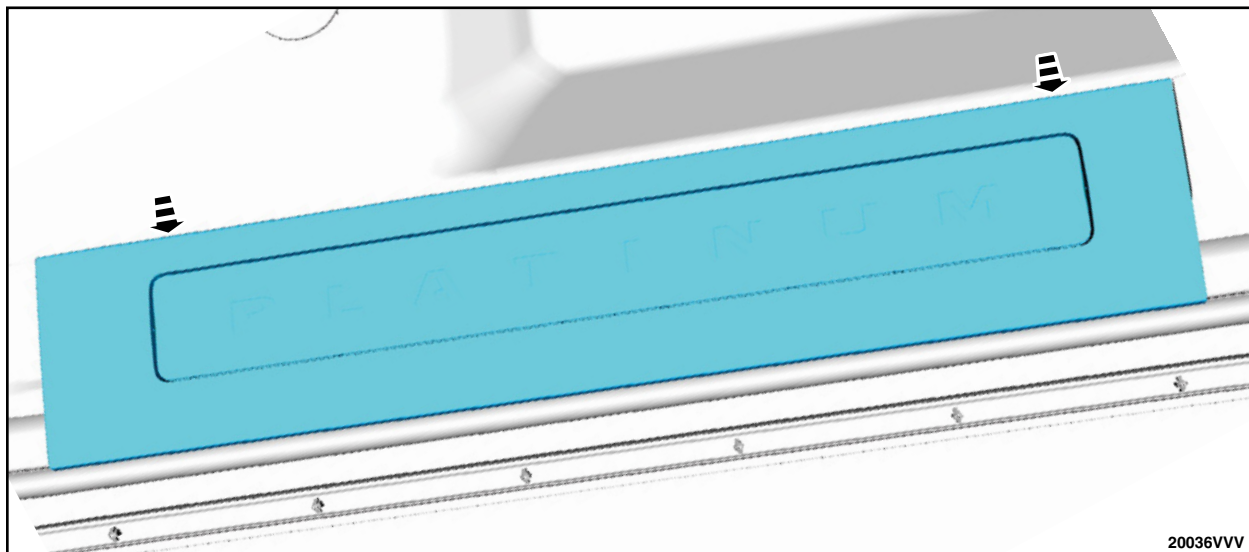


FIGURE 80

105. Connect the negative battery cable(s). Please follow the WSM procedures in Section 414-01.



**For 2017-2019 Model Year Vehicles, proceed to the steps below.  
For 2020-2022 Model Year Vehicles, proceed to page 49.**

**For 2017-2019 Model Years vehicles ONLY**

**NOTE:** Ford Diagnostic and Repair System (FDRS) cannot be used for programming on the 2017-2019 Super Duty vehicles.

**Module Reprogramming**

**NOTE:** Reprogram appropriate vehicle modules before performing diagnostics and clear all DTC's after programming. For DTC's generated after reprogramming, follow normal diagnostic service procedures.

1. Connect a battery charger to the 12V battery.

**NOTE:** Verify that the negative cable of the charger is installed on a chassis or engine ground, and not the 12 volt battery negative terminal to prevent the battery saver mode from activating on the vehicle.

**NOTE:** Make sure the IDS computer does not enter sleep mode during programming.

2. Reprogram the Body Control Module (BCM) using Integrated Diagnostic Software (IDS) release 126.05 or higher. Make sure you are connected to the Internet prior to reprogramming.

**NOTE:** Calibration files may also be obtained at [www.motorcraftservice.com](http://www.motorcraftservice.com).

**NOTE:** Follow the IDS on-screen instructions to complete the reprogramming procedure.

3. Under "Programmable Parameters" select "Vehicle". Then when prompted with the "Tailgate Release Switch" choose option "Double Press". Select the tick.
4. If available, under "Programmable Parameters" select "Tailgate Ajar Message". Choose option "indicator - Off/Disable". Select the tick.
5. Disconnect the battery charger from the 12V battery once the reprogramming has completed.



## Important Information for Module Programming

**NOTE:** When programming or reprogramming a module, use the following basic checks to ensure programming completes without errors.

- Make sure the 12V battery is fully charged before carrying out the programming steps and connect IDS/scan tool to a power source.
- Inspect Vehicle Communication Module (VCM) and cables for any damage. Make sure scan tool connections are not interrupted during programming.
- A hardwired connection is strongly recommended.
- Turn off all unnecessary accessories (radio, heated/cooled seats, headlamps, interior lamps, HVAC system, etc.) and close doors.
- Disconnect/depower any aftermarket accessories (remote start, alarm, power inverter, CB radio, etc.).
- Follow all scan tool on-screen instructions carefully.
- Disable IDS/scan tool sleep mode, screensaver, hibernation modes.
- Create all sessions Key ON Engine OFF (KOEO). Starting the vehicle before creating a session will cause errors within the programming inhale process.

## Recovering a module when programming has resulted in a blank module: **NEVER DELETE THE ORIGINAL SESSION!**

- a. Obtain the original IDS that was used when the programming error occurred during Module Reprogramming (MR) or Programmable Module Installation (PMI).
- b. Disconnect the VCM from the Data Link Connector (DLC) and the IDS.
- c. Reconnect the VCM to IDS and then connect to the DLC. Once reconnected, the VCM icon should appear in the corner of the IDS screen. If it does not, troubleshoot the IDS to VCM connection.
- d. Locate the original vehicle session when programming failed. This should be the last session used in most cases. If not, use the session created on the date that the programming failed.

**NOTE:** If the original session is not listed in the previous session list, click the Recycle Bin icon at the lower right of the previous session screen. This loads any deleted sessions and allows you to look through them. Double-click the session to restore it.

- e. Once the session is loaded, the failed process should resume automatically.
- f. If programming does not resume automatically, proceed to the Module Programming menu and select the previously attempted process, PMI or MR.
- g. Follow all on-screen prompts/instructions.
- h. The last screen on the IDS may list additional steps required to complete the programming process. Make sure all applicable steps listed on the screen are followed in order.





**For 2020-2022 Model Years vehicles ONLY**

**NOTE:** Integrated Diagnostic Software (IDS) cannot be used for programming on the 2020-2022 Super Duty vehicles.

**Module Programming**

**NOTE:** Program appropriate vehicle modules before performing diagnostics and clear all DTC's after programming. For DTC's generated after programming, follow normal diagnostic service procedures.

1. Connect a battery charger to the 12V battery.

**NOTE:** Verify that the negative cable of the charger is installed on a chassis or engine ground, and not the 12 volt battery negative terminal to prevent the battery saver mode from activating on the vehicle.

**NOTE:** If the diagnostic software does not load or if the vehicle cannot be identified properly, make sure there is a good internet connection and the VCM is properly connected to the DLC.

2. Log into Ford Diagnostic and Repair System (FDRS).

**NOTE:** Vehicle information is automatically retrieved by the diagnostic software and a Network Test is run. Vehicle identification data appears on the screen when this is complete.

3. Click 'Read VIN from Vehicle' or manually enter the VIN.

**NOTE:** Available modules are shown on the LH side of the screen, and available procedures are listed on the RH side of the screen. Modules that are communicating are highlighted in green.

4. Select Toolbox tab.

5. From the list on the LH side of the screen, select the BCM.

6. From the list on the RH side of the screen, select BCM - Body Control Module (BCM) Software Update.

7. Click RUN. Follow all on-screen instructions carefully.

8. From the list on the RH side of the screen, select BCM - Tailgate Interior Release Switch Configuration.

9. Click RUN. Follow all on-screen instructions carefully.

10. When prompted to choose a parameter state, select Double Press.

11. From the list on the RH side of the screen, select Tailgate Ajar Message.

12. Click RUN. Follow all on-screen instructions carefully.

13. When prompted to choose a parameter state, select Disable.



14. From the list on the RH side of the screen, select Self-Test and click RUN.
15. Click the Run Selected Tests button in the lower right.
16. Click the Clear & Retest button at the top of the screen to clear DTC's in all modules.
17. Disconnect the battery charger from the 12V battery once the programming has completed.

### Important Information for Module Programming

**NOTE:** When programming a module, use the following basic checks to ensure programming completes without errors.

- Make sure the 12V battery is fully charged before carrying out the programming steps and connect FDRS/scan tool to a power source.

**NOTE:** A good internet connection is necessary to identify the vehicle and to load the diagnostic software.

- Inspect Vehicle Communication Module II (VCM II)/Vehicle Communication and Measurement Module (VCMM) and cables for any damage. Make sure scan tool connections are not interrupted during programming.
- A hardwired connection is strongly recommended.
- Turn off all unnecessary accessories (radio, heated/cooled seats, headlamps, interior lamps, HVAC system, etc.) and close doors.
- Disconnect/depower any aftermarket accessories (remote start, alarm, power inverter, CB radio, etc.).
- Follow all scan tool on-screen instructions carefully.
- Disable FDRS/scan tool sleep mode, screensaver, hibernation modes.
- Create all sessions key on engine off (KOEO). Starting the vehicle before creating a session will cause errors within the programming inhale process.

### Recovering a module when programming has resulted in a blank module

- a. Disconnect the VCMII or VCMM from the data link connector (DLC) and your PC.
- b. After ten seconds, reconnect the VCMII/VCMM to the DLC and the PC. Launch FDRS. The VCMII/VCMM icon should turn green in the bottom right corner of the screen. If it does not, troubleshoot the FDRS to VCM connection.
- c. If you are using the same FDRS as the initial programming attempt, select the appropriate VIN from the Vehicle Identification menu. If you are using a different FDRS, select "Read VIN from Vehicle" and proceed through the Network Test.
- d. In the Toolbox menu, navigate to the failed module and Download/Run Programmable Module Installation (PMI). Follow the on-screen prompts. When asked if the original module is installed, select "No" and continue through the installation application.
- e. Once programming has completed, a screen may list additional steps required to complete the programming process. Make sure all applicable steps are followed in order.



**IMPORTANT NOTE:** Federal law prohibits selling motor vehicle parts or components that are under safety, compliance, or emissions recall. Unless a part is requested to be returned to Ford, all parts replaced under this FSA must be scrapped in accordance with all applicable local, state and federal environmental protection and hazardous material regulations. Refer to the Parts Retention, Return, & Scrapping section of the FSA dealer bulletin for further information.

