March 10, 2017 05943 Version 5

Safety Recall: Rear Wire Harness/Rear Subframe Harness

Supersedes 16-093, dated January 10, 2017, to revise the section highlighted in yellow

AFFECTED VEHICLES

Year	Model	Trim	VIN Range
2017	Ridgeline	AWD	Check the iN VIN status for eligibility

REVISION SUMMARY

Added additional information to PARTS INFORMATION and WARRANTY CLAIM INFORMATION.

BACKGROUND

Water may enter connector C601 on the rear wire harness and rear subframe harness causing a MIL to come on and setting related and possibly unrelated VSA and/or AWD DTCs.

The most common DTCs set include:

DTC	DTC Description
U0416-68	ECM Failure
U0416-F8	VSA Modulator-Control Unit Malfunction
U0416	VSA System Malfunction
U0199	MICU lost communication with power window master switch
U0180	Climate Control Unit lost communication with automatic lighting control unit-sensor
C1040-00	Wheel Speed Signal Error
C003A-62	Right Rear Wheel Speed Sensor Signal Compare Failure
C003A-14	Right Rear Wheel Speed Sensor Circuit Failure (Circuit Short to Ground or Open)
C0037-62	Left Rear Wheel Speed Sensor Signal Compare Failure
C0037-14	Left Rear Wheel Speed Sensor Circuit Failure (Circuit Short to ground or open)

There will be multiple repair procedures depending on the current condition and production date of the rear wire harness.

CUSTOMER INFORMATION: The information in this bulletin is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely maintain your vehicle. These procedures should not be attempted by “do-it-yourselfers,” and you should not assume this bulletin applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Honda automobile dealer.

CUSTOMER NOTIFICATION

Owners of affected vehicles have been sent a notification of this campaign.

Do an iN VIN status inquiry to make sure the vehicle is shown as eligible.

Some vehicles affected by this campaign may be in your new or used vehicle inventory. Repair these vehicles before they are sold.

Federal law requires that all affected new vehicles be repaired before sale. In addition, failure to repair a vehicle subject to a recall or campaign may subject your dealership to claims or lawsuits from the customer or anyone else harmed as a result of such failure. Furthermore, state law may provide American Honda with the right to seek indemnification in any such claim or lawsuit. To see if a vehicle in inventory is affected by this recall, do a VIN status inquiry before selling it.

CORRECTIVE ACTION

Inspect and determine which repair procedure is applicable. Replace or repair the rear wire harness and/or rear subframe harness according to the inspection, and dry/replace subsequent component parts damaged by water intrusion.

PARTS INFORMATION

Part Name	Part Number	Quantity
Sub-cord Repair Kit (REPAIR PROCEDURE A)	32108-T6Z-306	1
Rear Wire Harness (REPAIR PROCEDURE B) RT, RTL, RTL-T, RTS, Sport Black, RTL-E	 32108-T6Z-A01 32108-T6Z-A41	 1
Rear Subframe Harness (REPAIR PROCEDURE B and C)	32114-TG7-A00	1
Left and Right Upper Pillar Trim Clip (ALL REPAIR PROCEDURES)	91561-TA5-A11	2

NOTE: Inspect the vehicle, and follow the applicable REPAIR PROCEDURE. You may be required to order the following applicable parts to complete the repair.

Rear wheel speed sensor

Right Rear Wheel Speed Sensor	57470-TZ6-A02	1
Left Rear Wheel Speed Sensor	57475-TZ6-A02	1

Differential oil pressure sensor

Differential Oil Pressure Sensor	28660-50P-004	2
Gasket (10 mm)	90471-PW7-A00	2

Differential pump motor

Differential Oil Pump Motor	48900-5M0-003	1
Drain Washer (18 mm)	90471-PX4-000	1
Drain Washer (20 mm)	94109-20000	1

REQUIRED MATERIAL – DIFFERENTIAL PUMP MOTOR

Part Name	Part Number	Quantity
DPF II Fluid	08200-9007	2

Differential assembly

Differential Carrier Assembly	41200-5M0-000	1
Drain Washer (18 mm)	90471-PX4-000	1
Drain Washer (20 mm)	94109-20000	1
Flange Bolt (10 mm x 25 mm)	90167-SAA-010	4
Flange Bolt (14 mm x 71 mm)	90184-TF0-000	2
Flange Bolt (14 mm x 85 mm)	90160-TZ6-A00	1
Flange Bolt (14 mm x 142 mm)	90198-SZW-000	1
Flange Bolt (10 mm x 29 mm)	90382-SH9-003	4
Bolt 12 Point (8 mm x 21 mm)	90113-S10-000	4
Flange Nut (10 mm)	90310-TK5-A00	4
Set Ring (26 mm x 1.8 mm) (Differential assembly)	44319-SR1-003	2

REQUIRED MATERIAL – DIFFERENTIAL ASSEMBLY

Part Name	Part Number	Quantity
DPF II Fluid	08200-9007	2

TOOL INFORMATION (REPAIR PROCEDURE A ONLY)

Tool Name	Tool Number	Quantity
Terminal Pin Tool A	07JAZ-002010A	1
Crimper with Die Set	07NGZ-001010A	1
Interior Trim Tool (Included in the KTC Trim Tool Set P/N SOJATP2014 available through the Honda Tool and Equipment Program.)	AP201-N	1

WARRANTY CLAIM INFORMATION

NOTE: Use the warranty claim information with the template IDs below **when you are replacing the harness ONLY, with no additional parts. If additional parts are needed, do not use this warranty claim information.**

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
7370D7	Inspect and do REPAIR PROCEDURE A.	2.7 hrs	6HN00	KD300	16-093A	32108-T6Z-A00
7371CF	Inspect and do REPAIR PROCEDURE B. (Trims: RT, RTL, RTL-T, RTS, Sport)	7.7 hrs	6HN00	KD300	16-093B	32108-T6Z-A00
7371CF	Inspect and do REPAIR PROCEDURE B. (Trims: Black, RTL-E)	7.7 hrs	6HN00	KD300	16-093C	32108-T6Z-A00
7371CG	Inspect and do REPAIR PROCEDURE C.	2.6 hrs	6HN00	KD300	16-093D	32108-T6Z-A00

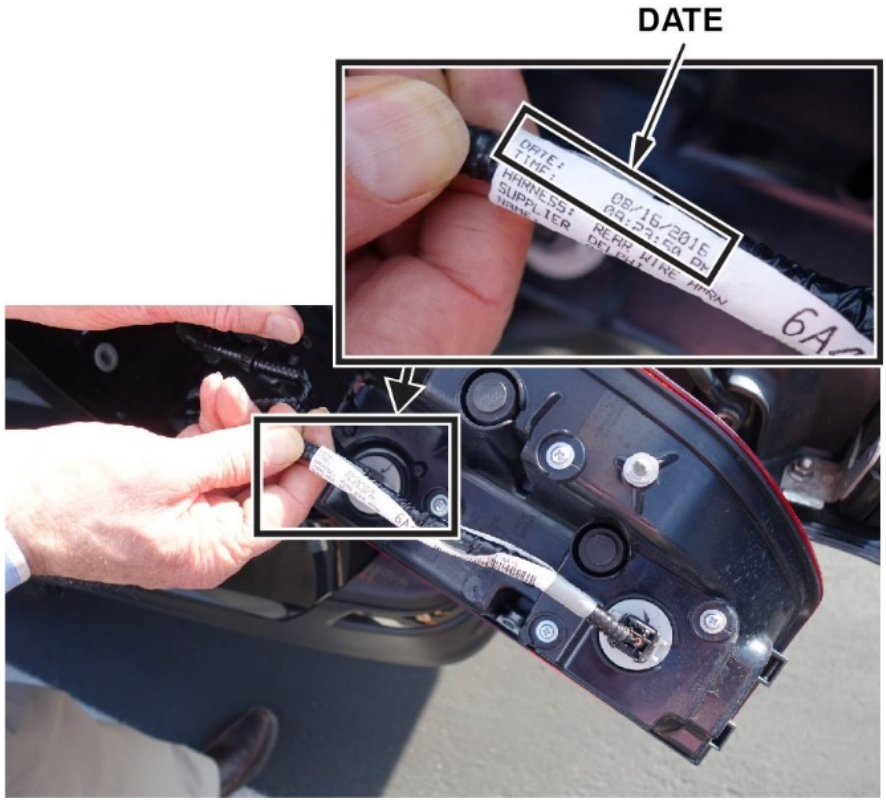
NOTE:

- Use the warranty claim information below (use a regular claim template) when replacing the harness with additional parts to complete the repair. If no additional parts are needed, use the warranty claim information above.
- The differential assembly includes the differential motor and both oil pressure sensors.

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
7371CF	Inspect and do REPAIR PROCEDURE B. (Trims: RT, RTL, RTL-T, RTS, Sport)	7.7 hrs	6HN00	KD300	Template IDs cannot be used because of too many parts variations.	32108-T6Z-A00
7371CF	Inspect and do REPAIR PROCEDURE B. (Trims: Black, RTL-E)	7.7 hrs	6HN00	KD300		32108-T6Z-A00
7371CG	Inspect and do REPAIR PROCEDURE C.	2.6 hrs	6HN00	KD300		32108-T6Z-A00
Additional Parts List – Include the add codes to the LON's above only if part(s) were replaced.						
A	Wheel Speed Sensor (one side)	0.3 hr	6HN00	KD300	Template IDs cannot be used because of too many parts variations.	32108-T6Z-A00
B	Wheel Speed Sensor (both sides)	0.4 hr	6HN00	KD300		32108-T6Z-A00
C	Oil Pressure Sensor (one side)	0.2 hr	6HN00	KD300		32108-T6Z-A00
D	Oil Pressure Sensor (both sides)	0.2 hr	6HN00	KD300		32108-T6Z-A00
E	Differential Motor	0.5 hr	6HN00	KD300		32108-T6Z-A00
F	Differential Assembly	1.3 hr	6HN00	KD300		32108-T6Z-A00

INSPECTION PROCEDURE

1. Remove the left taillight. Refer to the service information.
2. Check the date on the label on the rear wire harness.
   - If the harness date is **before** August 9, 2016 (08/09/2016), go to step 3.
   - If the harness date is **on or after** August 9, 2016 (08/09/2016), go to REPAIR PROCEDURE C.

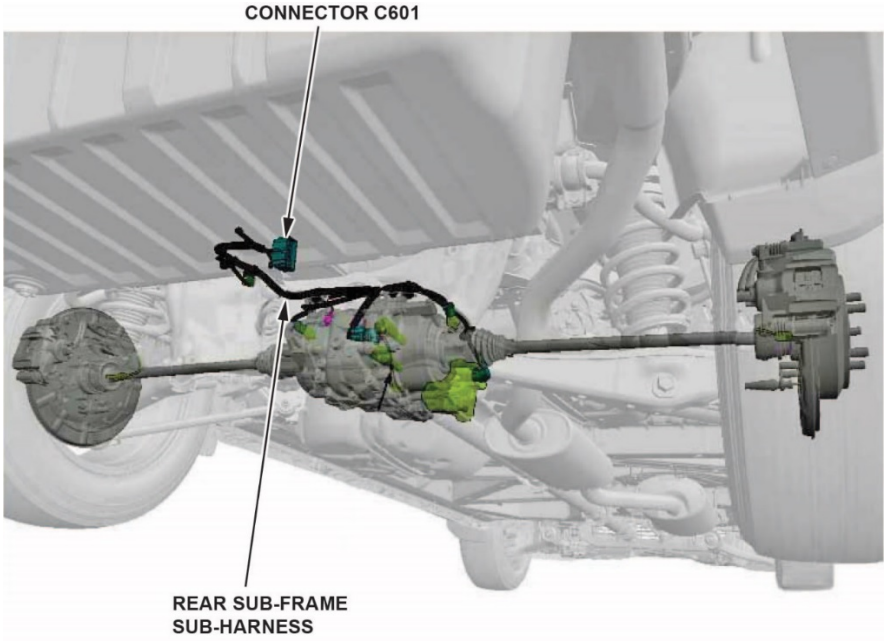


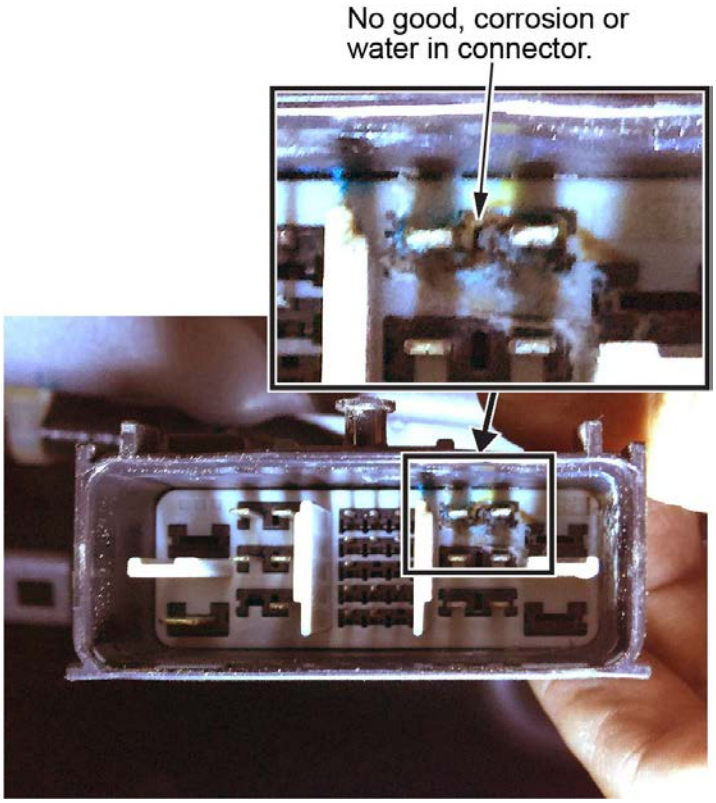
3. Disconnect connector C601 (rear wire harness/rear subframe harness), and inspect the interior of the connector and terminals on both the male and the female side for signs of water intrusion and/or corrosion.

   Is there water and/or corrosion inside the connector?

   Yes – Go to REPAIR PROCEDURE B.

   No – Go to REPAIR PROCEDURE A.

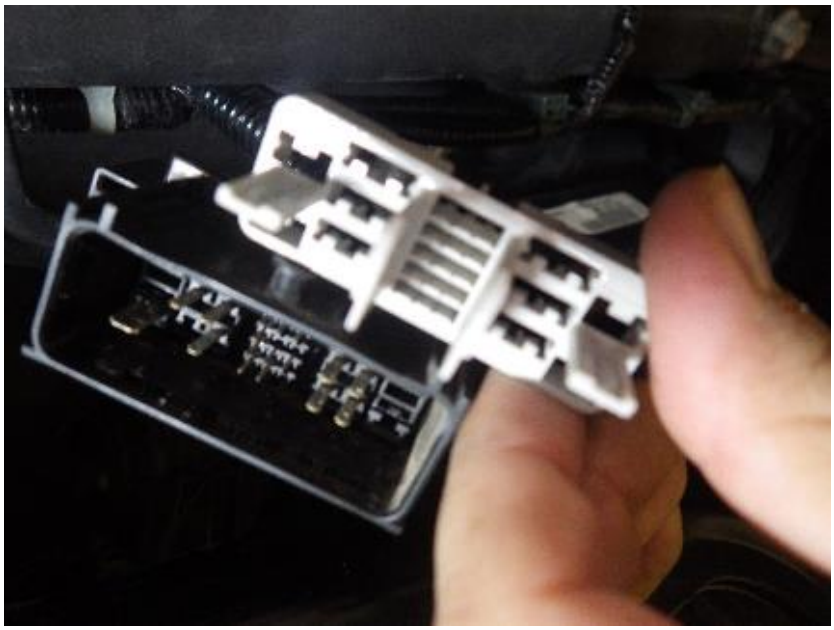




REPAIR PROCEDURE A

NOTE: This procedure covers vehicles that have no water intrusion or corrosion at connector C601.

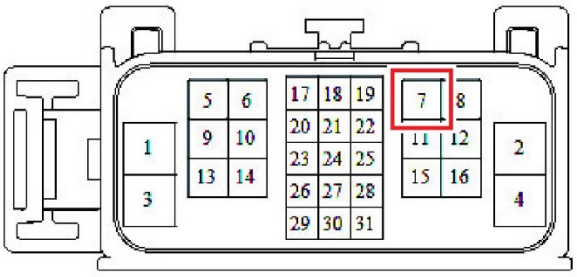
1. Remove the inner gray plastic cap on the male side of connector C601

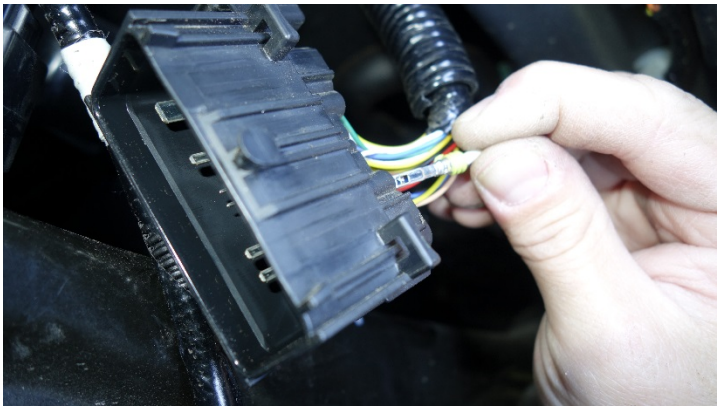


2. De-pin and remove terminal No. 7 using Terminal Pin Tool A (T/N 07JAZ-002010A).

   NOTE: Connector view is terminal side of connector.

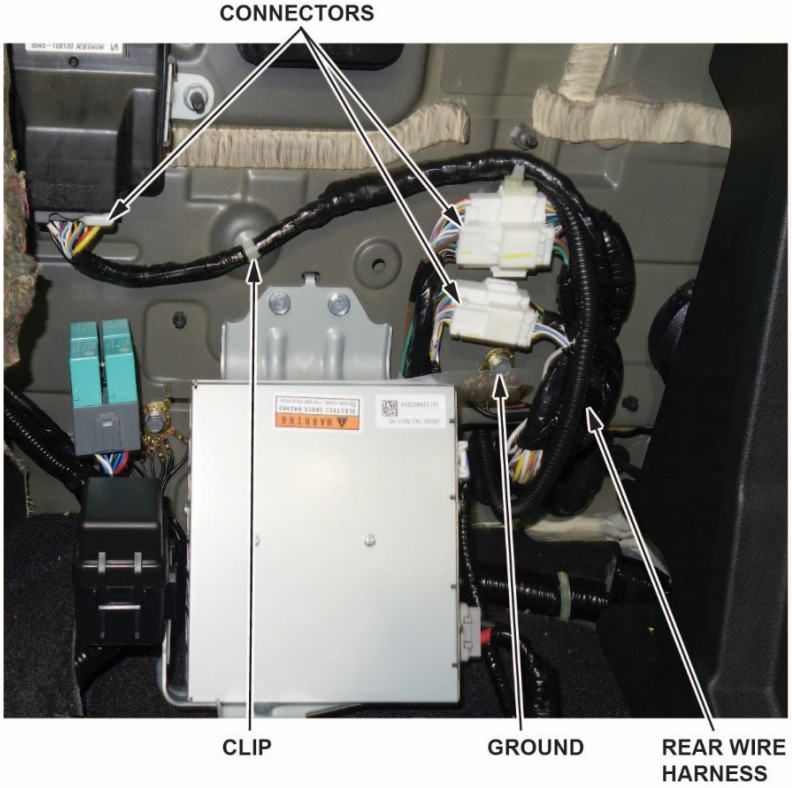
C601 (Male) (Rear Wire Harness)





3. Check the terminal to confirm there is no water intrusion or corrosion.
4. Remove the rear seats to access the rear harness grommet, ground, and connectors. Refer to the service information.
5. Remove the rear insulator.

6. Remove the connectors, harness clips, and grounds for the rear harness inside the cabin (bottom corner behind driver's side rear seat).

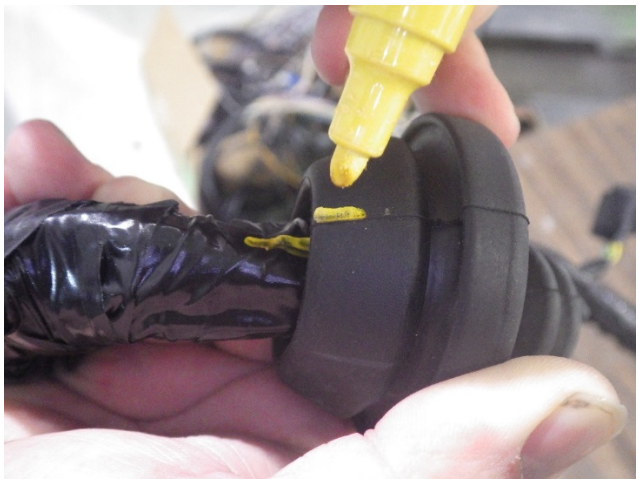


7. Raise the vehicle on a lift.
8. Remove the left rear wheel.
9. Remove the driver's side rear inner fender. Refer to the service information.

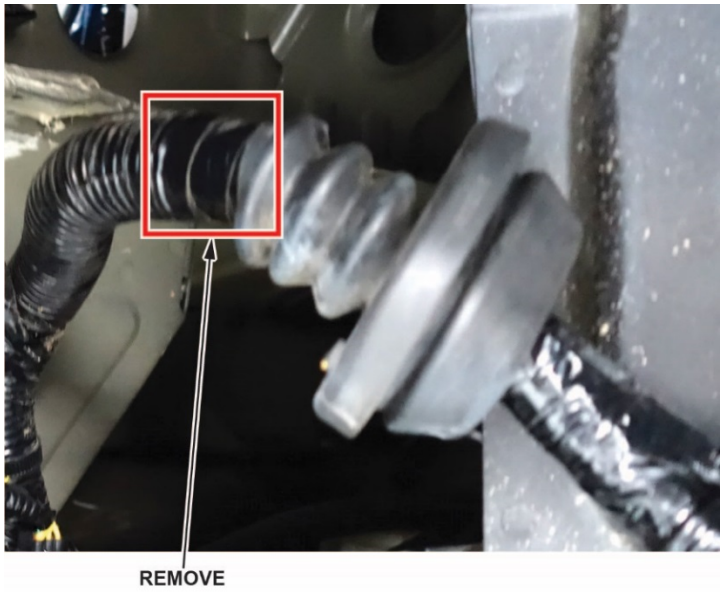
10. Remove the grommet, and pull the harness through the hole.

11. Remove the harness clip closest to the grommet.

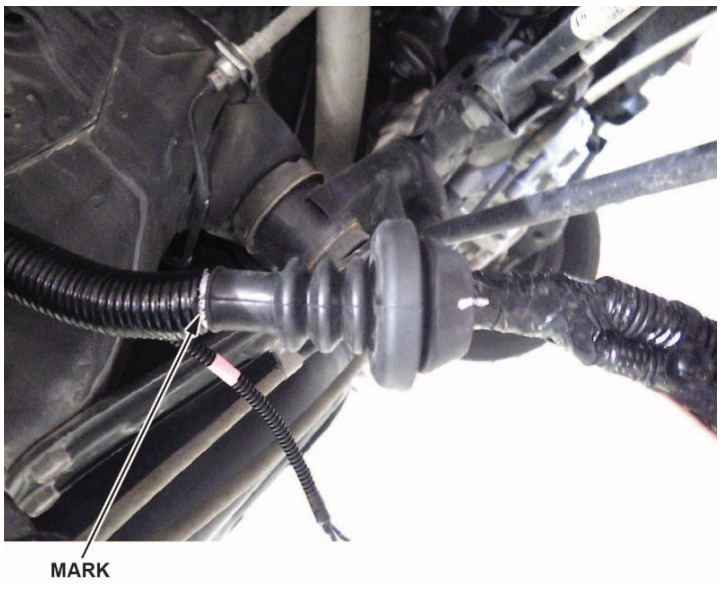
12. Make a mark on the interior side of the grommet and harness as shown below to return it to the original position after the sub-cord kit is installed.



13. Remove just enough electrical tape on the exterior side of the harness to slip a wire through the grommet.



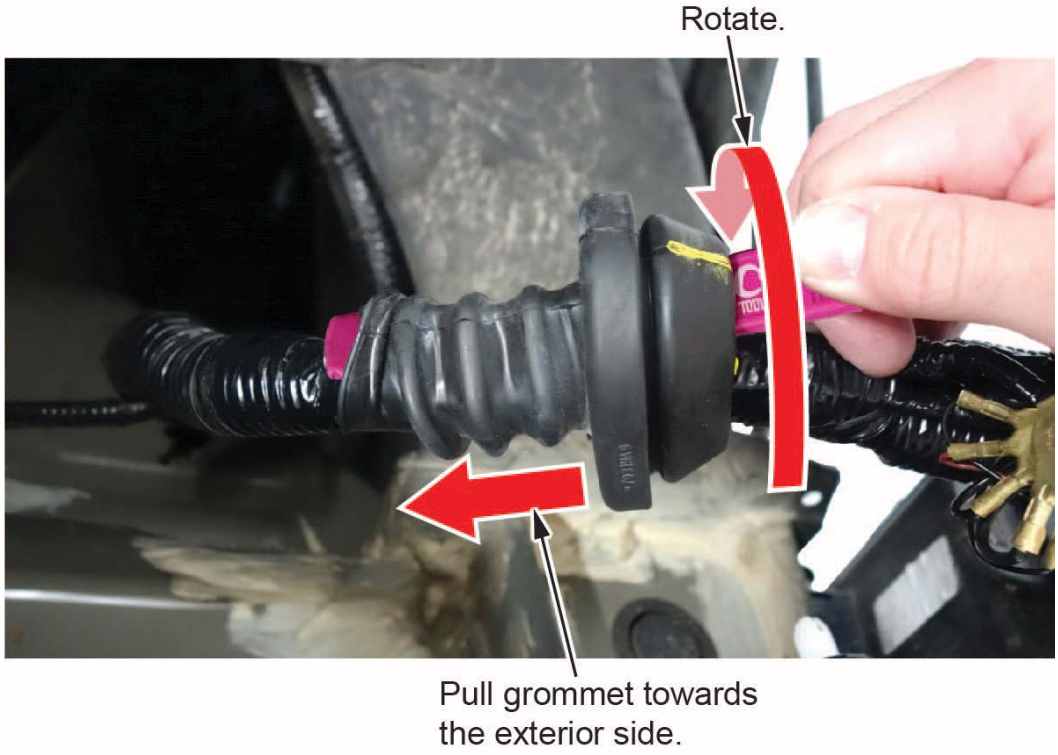
14. Make a mark where the exterior side of the grommet ends on the harness so you know the location when installing.



15. Insert an American Honda-approved interior trim tool (T/N AP201-N or equivalent) into the upper side of the grommet from the interior side.

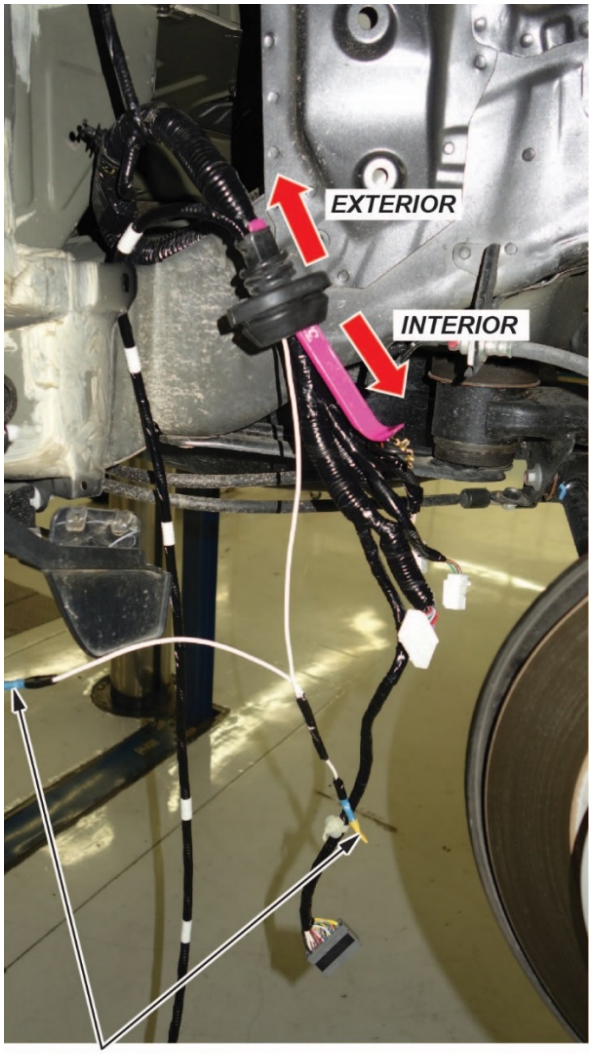
16. Rotate the tool sideways to create a larger gap between the grommet and the harness so you can pull through the sub-cord harness.

    NOTE: Pull the interior side of the grommet towards the exterior side of the grommet to get the sub-cord harness through easier.



17. Pull the sub-cord harness through the grommet. Make sure the side with two blue butt connectors are on the interior side of the harness.

    NOTE: Make sure to rotate the interior trim tool as shown in the step before to route the sub-cord harness easier.

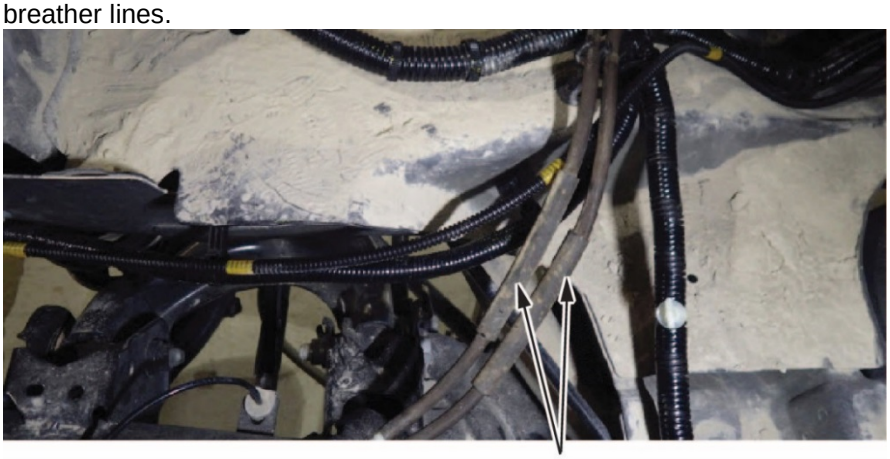


BUTT CONNECTORS
ON INTERIOR SIDE

18. Route the other end of the sub-cord harness along the rear wire harness to connector C601.

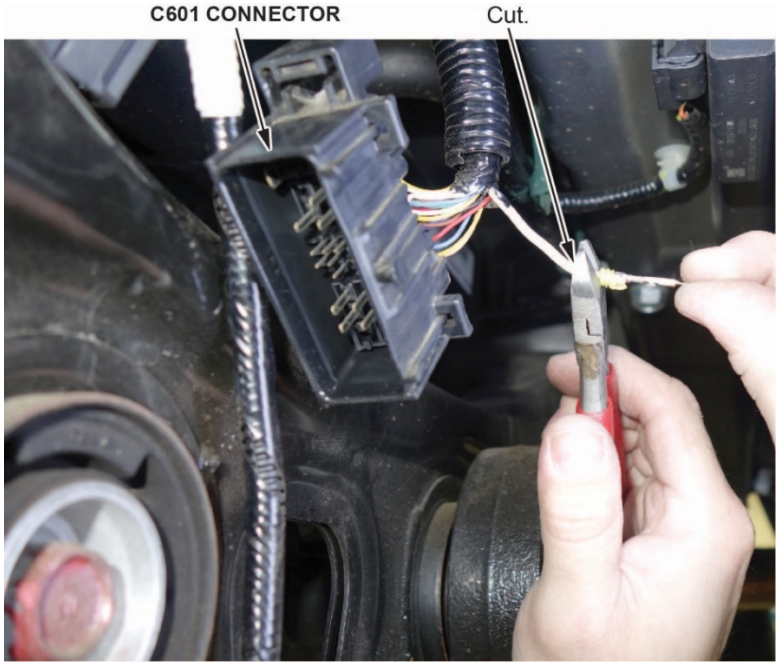
    NOTE:

- Leave the tape on the sub-cord harness for protection while routing.
- Make sure the sub-cord harness routes under the differential breather lines, and makes no contact with the breather lines.



BREATHER LINES

19. Cut the terminal removed in step 2 (terminal No. 7 on connector C601) as shown below.

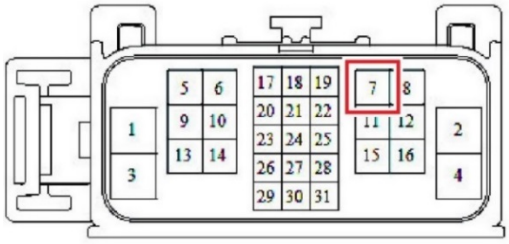


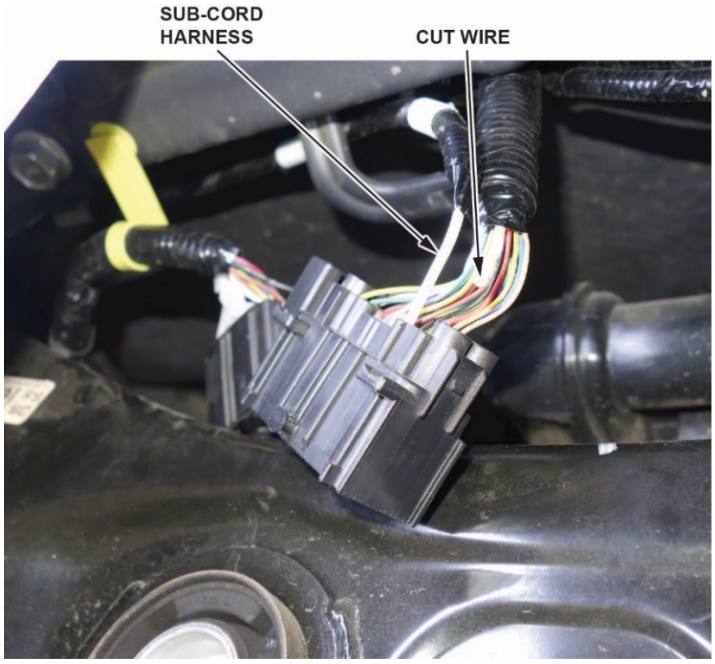
20. Remove the tape from the terminal on the sub-cord harness, and install it into the terminal No. 7 cavity in connector C601.

    NOTE:

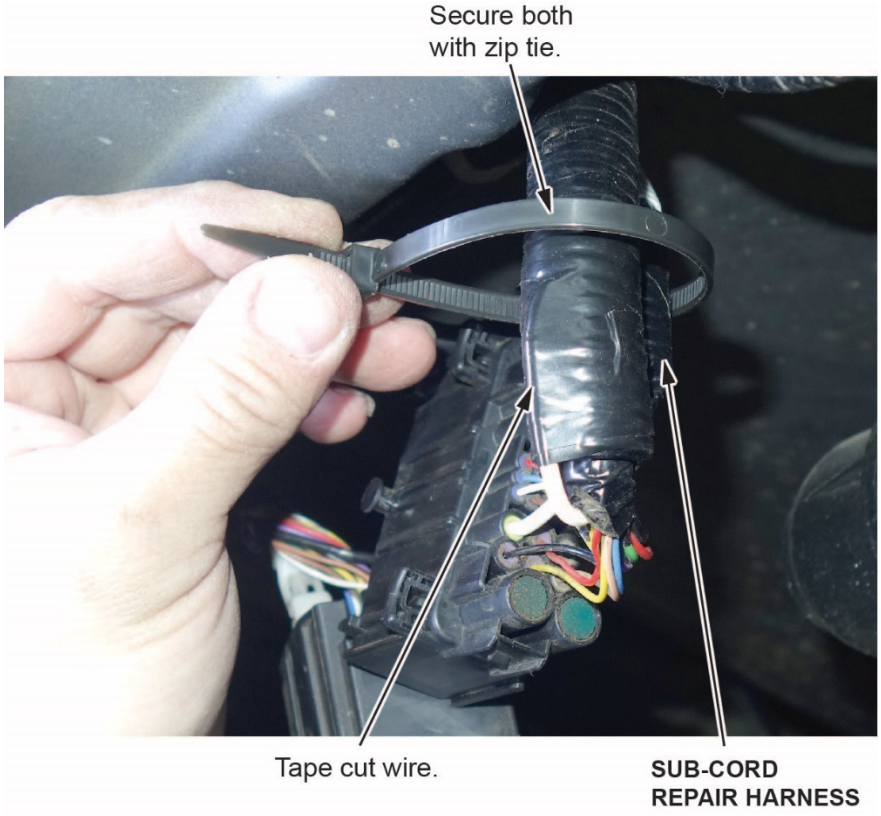
    - Make sure the sub-cord harness is routed correctly and the weather seal is properly set.
    - Connector view is terminal side of connector.

C601 (Male) (Rear Wire Harness)





21. Tape the cut wire, then use a zip tie to secure the cut wire and the sub-cord harness to the rear wire harness.

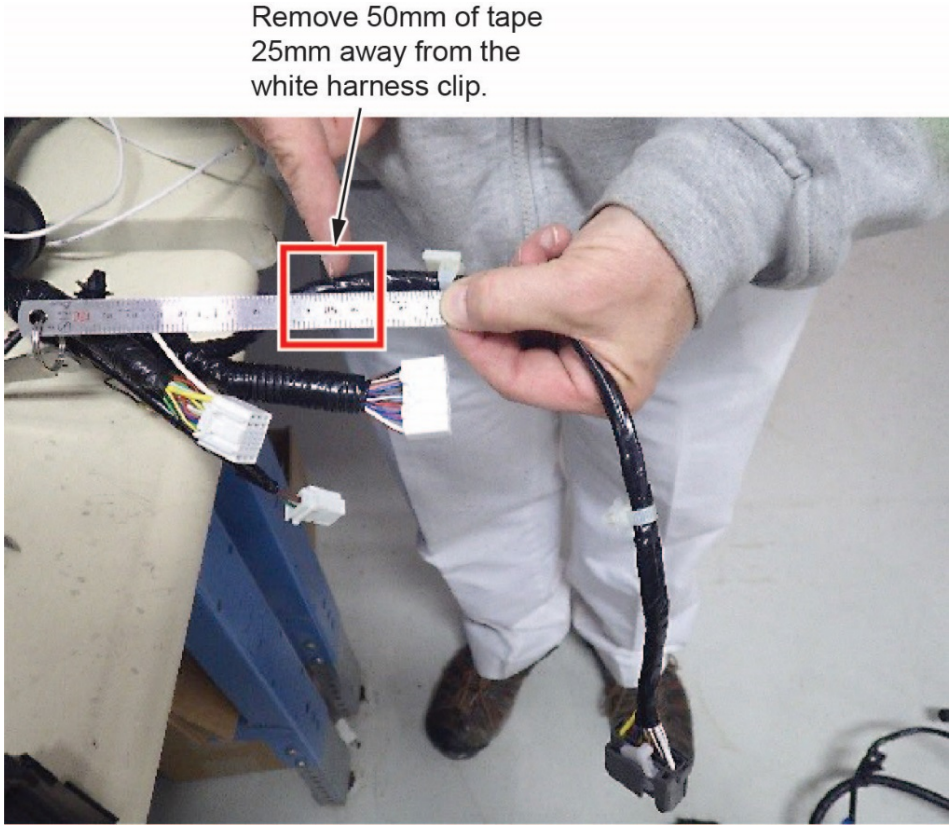


22. Starting from connector C601, use the zip ties provided to secure the sub-cord harness to the rear wire harness at every white mark on the sub-cord harness. Start at the connector, and work towards the grommet.

23. Line up the grommet with the mark made in step 11.
24. Pull any excess sub-cord harness towards the interior side of the grommet. Using electrical tape, wrap any exposed wire on the exterior side of the grommet.

    NOTE: Starting from the grommet, wrap the tape three times, then move down. Continue this process until all the exposed wire is covered, then repeat going back to the grommet.

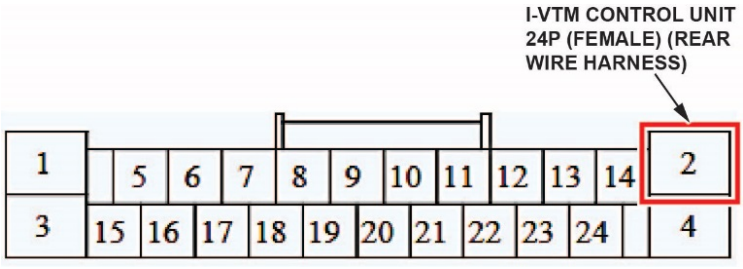
25. Check the harness clip you removed in step 5 and 10. If it has damage from removal, replace it with the replacement provided in the kit.
26. Locate the i-VTM control unit 24P connector (female) on the rear wire harness. Measure approximately 25 mm (1 in.) from the white harness clip farthest from the i-VTM connector, and remove approximately 50 mm (2 in.) of tape (25 mm [1 in.] to 75 mm [3 in.] away from the clip) from the highlighted area in the photo below.

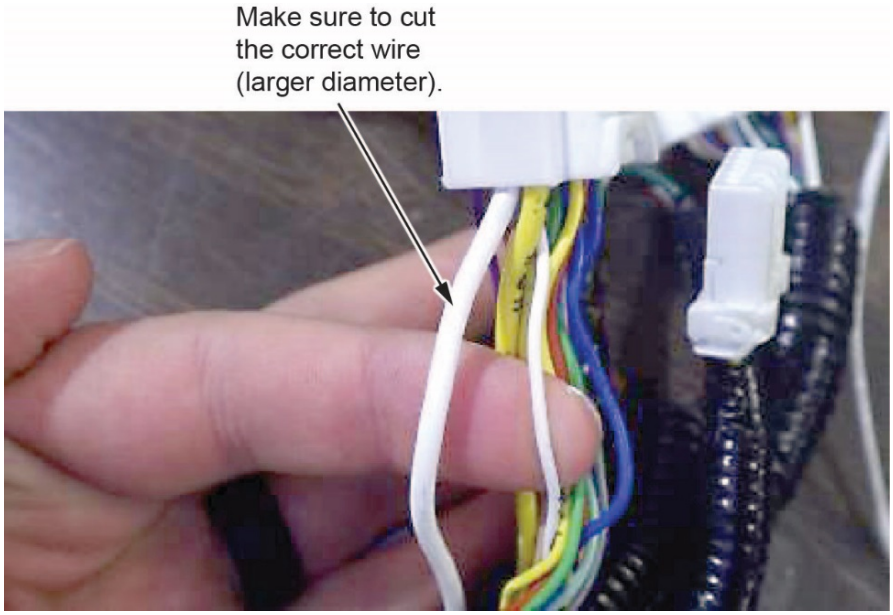


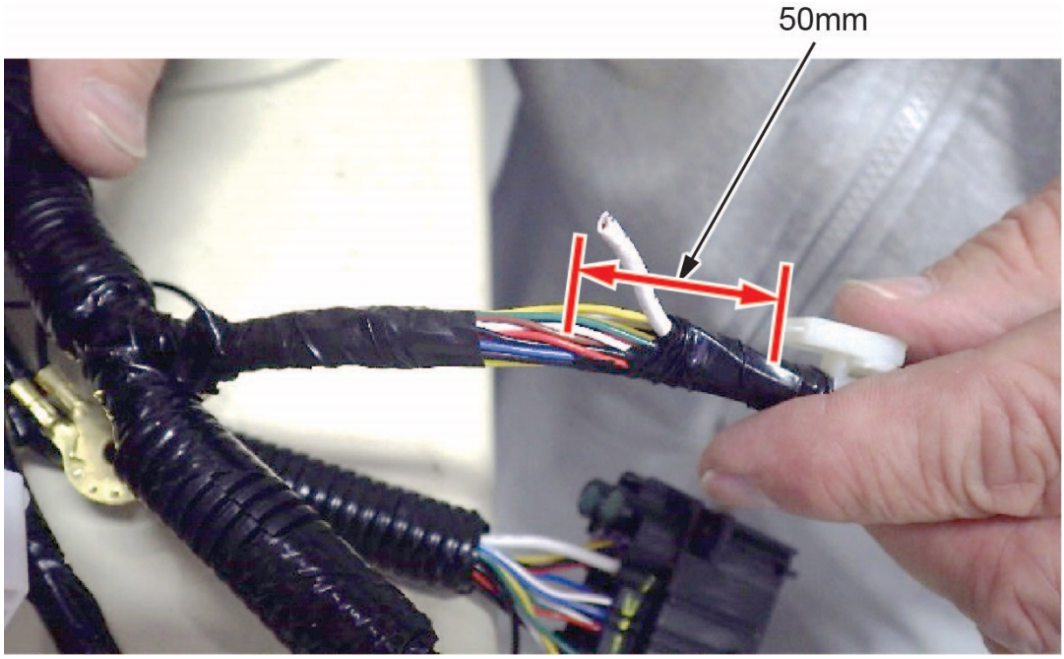
27. Cut the white wire going to terminal No. 2 approximately 50 mm (2 in.) away from the white harness clip in the section where you removed the tape.

    NOTE:

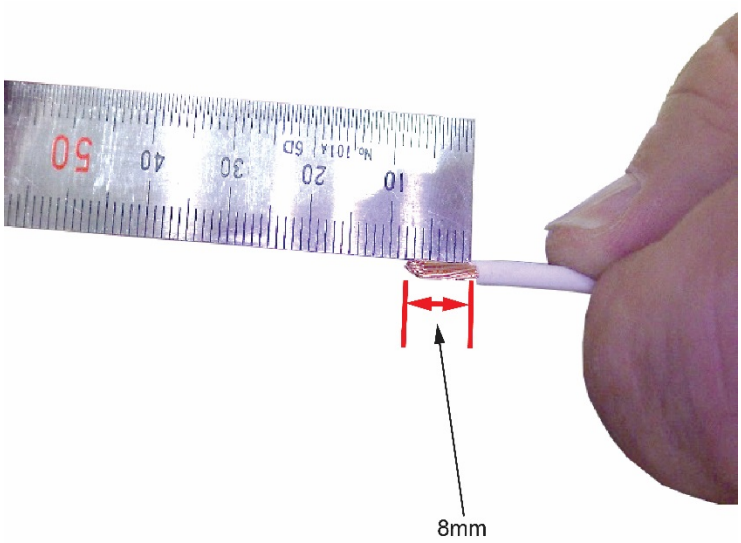
    - Make sure you are cutting the correct white wire. The terminal No. 2 wire is the larger diameter white wire.
    - Connector view is terminal side of connector.





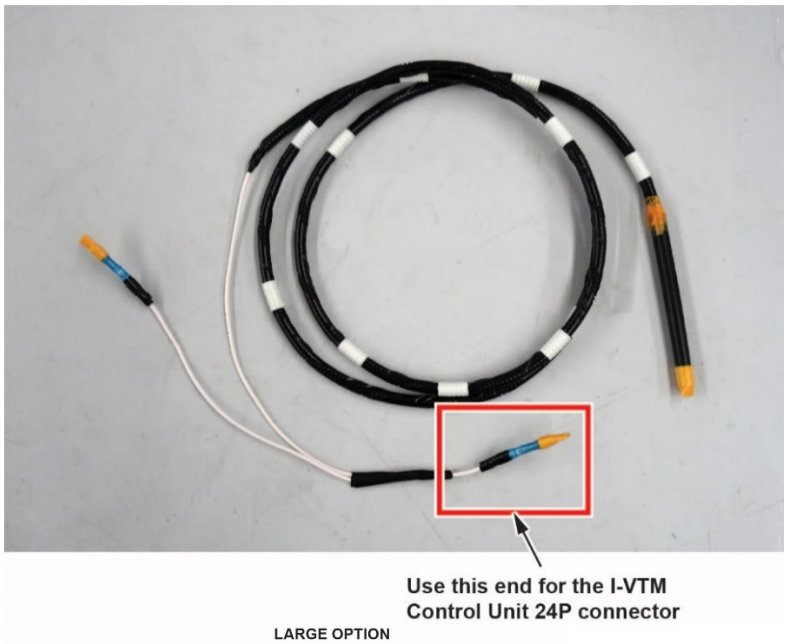


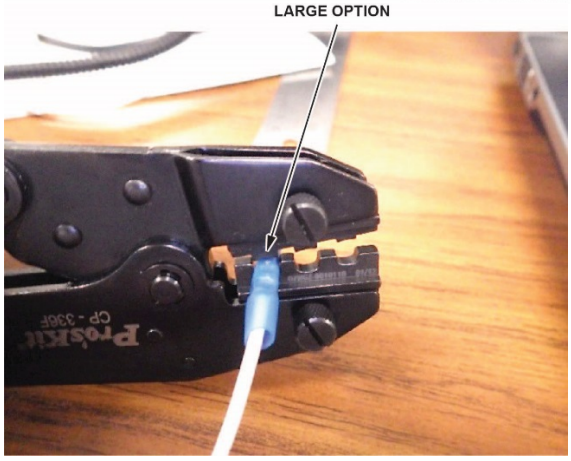
28. Strip 8 mm (0.3 in.) of the wire insulation on the connector side.



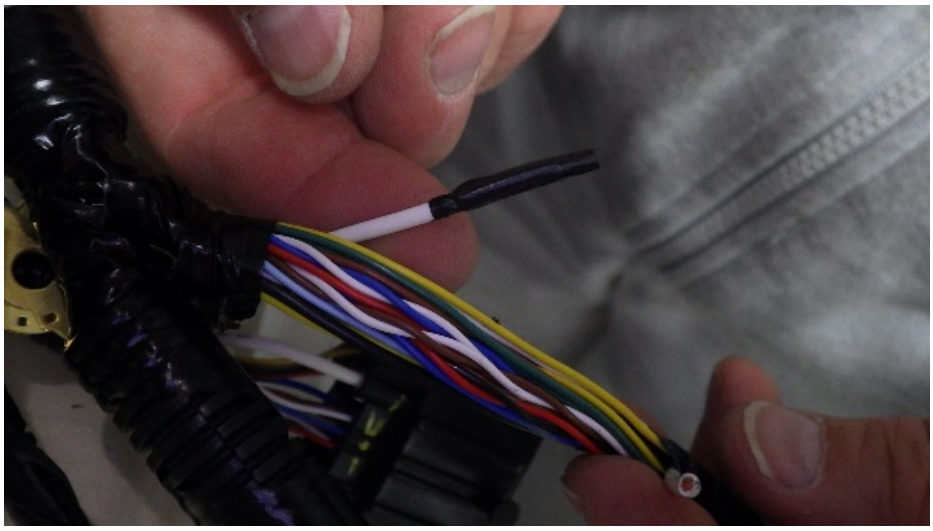
29. Crimp the sub-cord harness to the stripped wire on the connector side using only the Crimper with Die Set (T/N 07NGZ-001010A).

    NOTE:
    - Crimp the correct butt connector for the i-VTM control unit 24p connector as shown below.
    - Use this end for the I-VTM Control Unit 24P connector
    - Use the large option on the crimp tool.

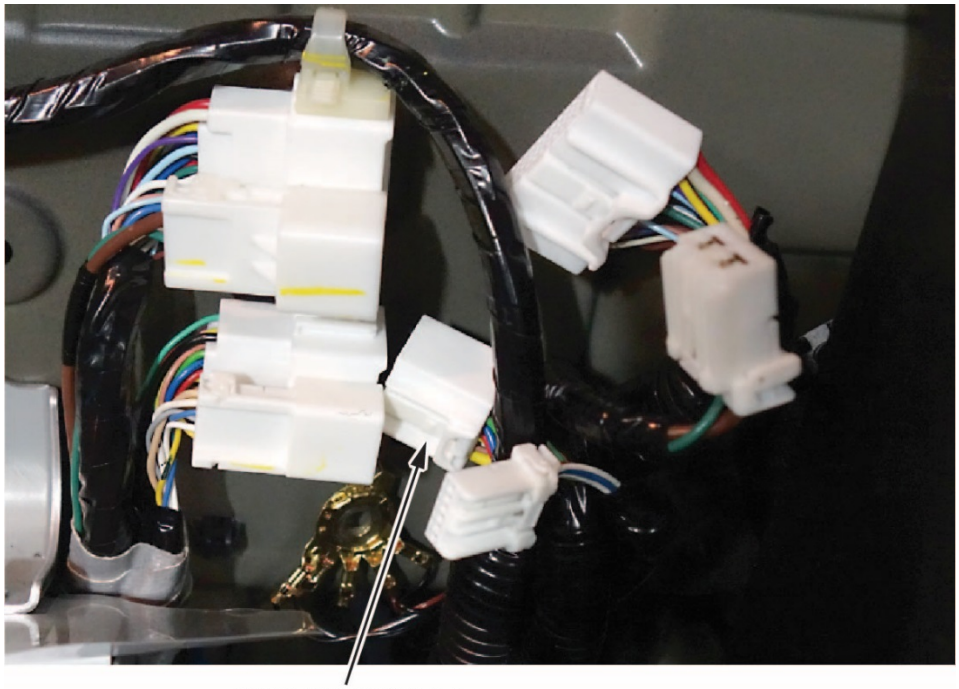




30. Tape the other side of the cut wire, and insert it back into the wire loom. Tape back the section you removed, but do not tape the sub-cord harness wire.



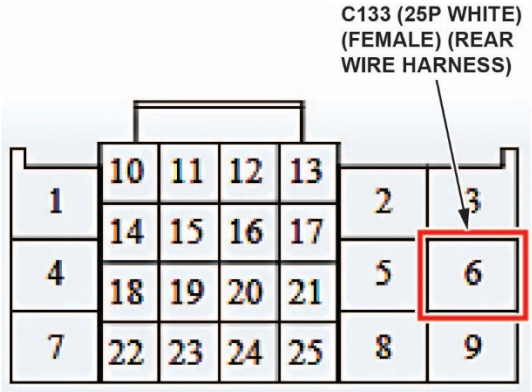
31. Install the corrugated tubing on the sub-cord harness wire crimped to the i-VTM connector.
32. Locate connector C133 (25P white) on the rear wire harness. Remove the tape and the corrugated tube. Save the corrugated tube to reuse it.

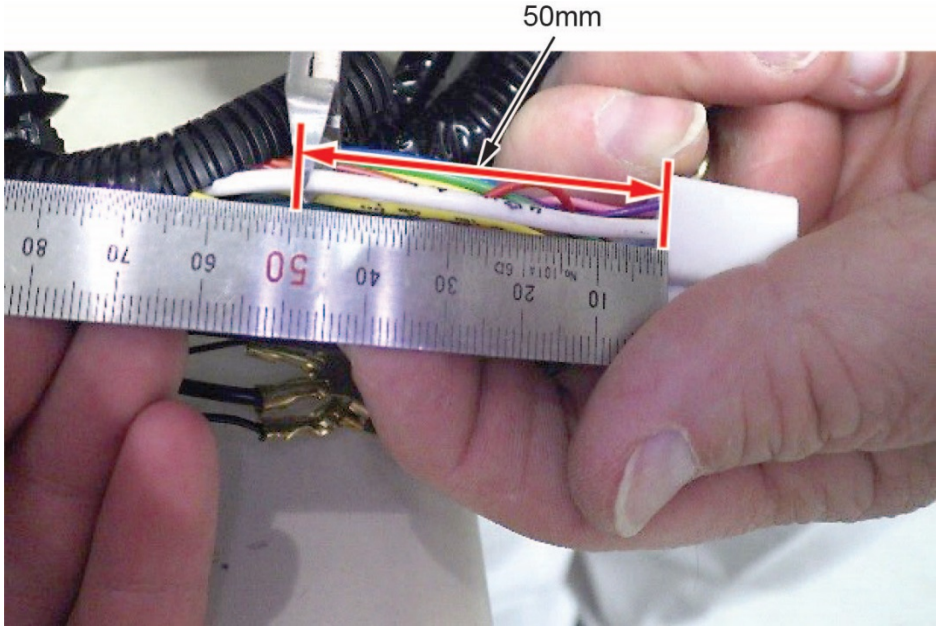


33. Cut the white wire going to terminal No. 6 approximately 50 mm (2 in.) from connector C133.

NOTE:

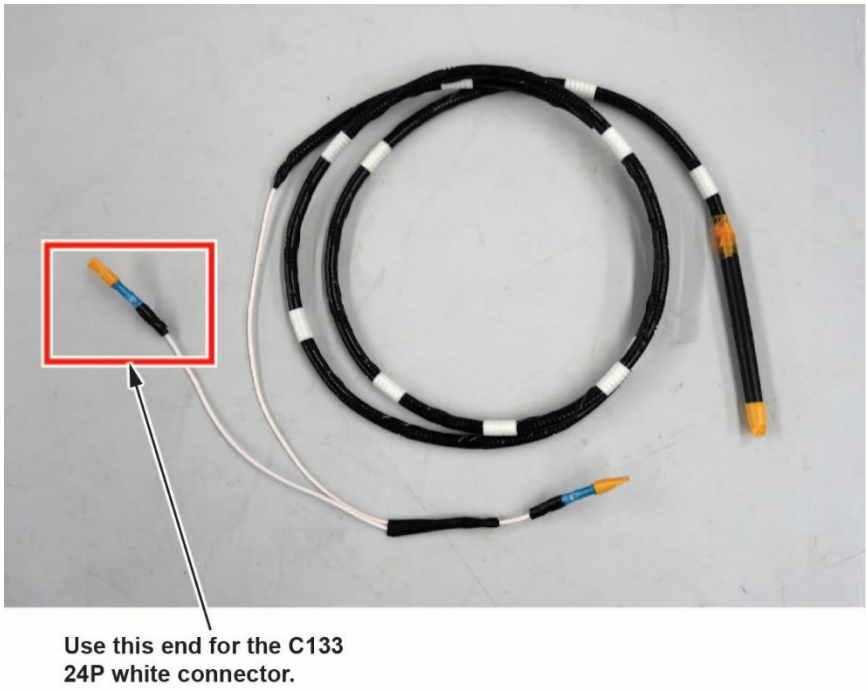
- Make sure you are cutting the correct white wire. The terminal No. 6 wire is the larger diameter white wire.
- Connector view is terminal side of connector.

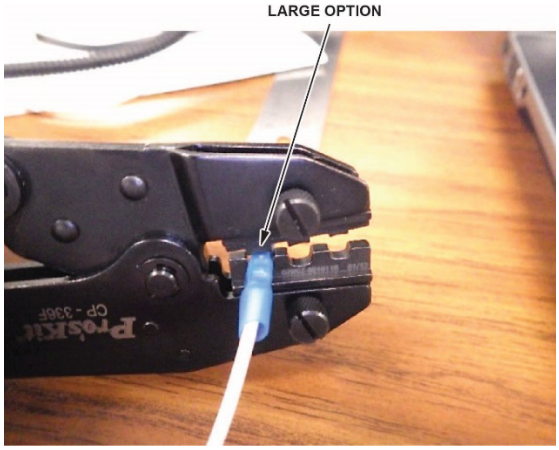




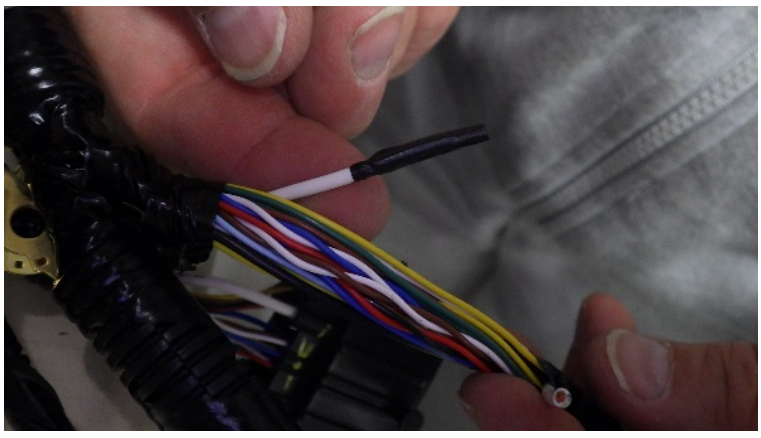
34. Strip 8 mm (0.3 in.) of the wire insulation on the connector side.
35. Crimp the sub-cord harness to the stripped wire on the connector side using only the Crimper with Die Set (T/N 07NGZ-001010A).

    NOTE:
    - Crimp the correct butt connector for connector C133 as shown below.
    - Use the large option on the crimp tool.

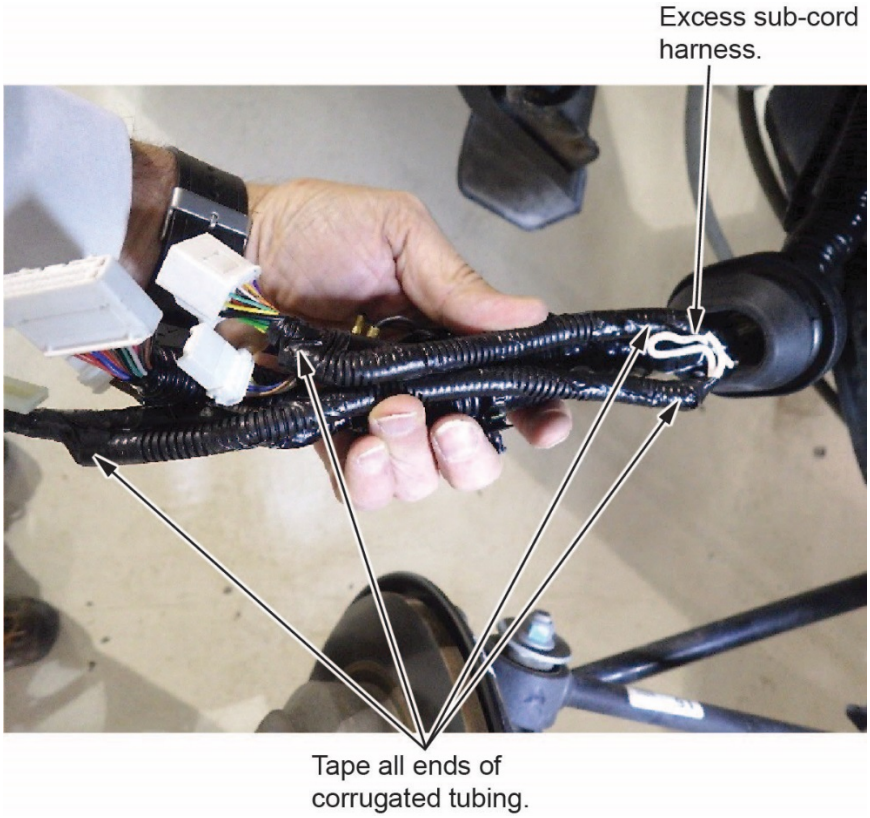




36. Tape the other side of the cut wire, and insert it back into the wire loom.



37. Install the original corrugated tubing, and tape at both ends.
38. Install the corrugated tubing on the sub-cord harness wire crimped to connector C133.
39. Adjust any excess sub-cord harness wires towards the grommet as shown below, and tape all the ends of the corrugated tubing.



40. Route the sub-cord harness inside (towards the center of the vehicle) of the rear wire harness before the next step to prevent interference with the seat and seatbelt components.

41. Tape the rear wire harness and sub-cord harness together near the grommet.

42. Route the rear wire harness back through the opening into the cabin, and install the grommet.

43. Install the connectors, grounds, and clips.

44. Install all other removed parts in the reverse order of disassembly. Refer to the service information.

    NOTE: Be sure to replace the must-replace clips on the left and right upper C-pillar trim.

45. Clear any set DTCs.

REPAIR PROCEDURE B

NOTE: This procedure covers vehicles where there is water or corrosion at connector C601.

1. Using the procedures from the service information, remove the following components:
   - Left inner fender panel
   - Tailgate trim
   - Left and right side bed panels
   - Front bed panel
   - Bed floor
   - Evaporative canister
   - Rear seats
   - Rear panel insulator
   - Rear Bumper
2. Check the following components/connectors for any water or corrosion. Replace any affected component if there is any **corrosion**. If there is water but no corrosion, dry it out and reuse the component.

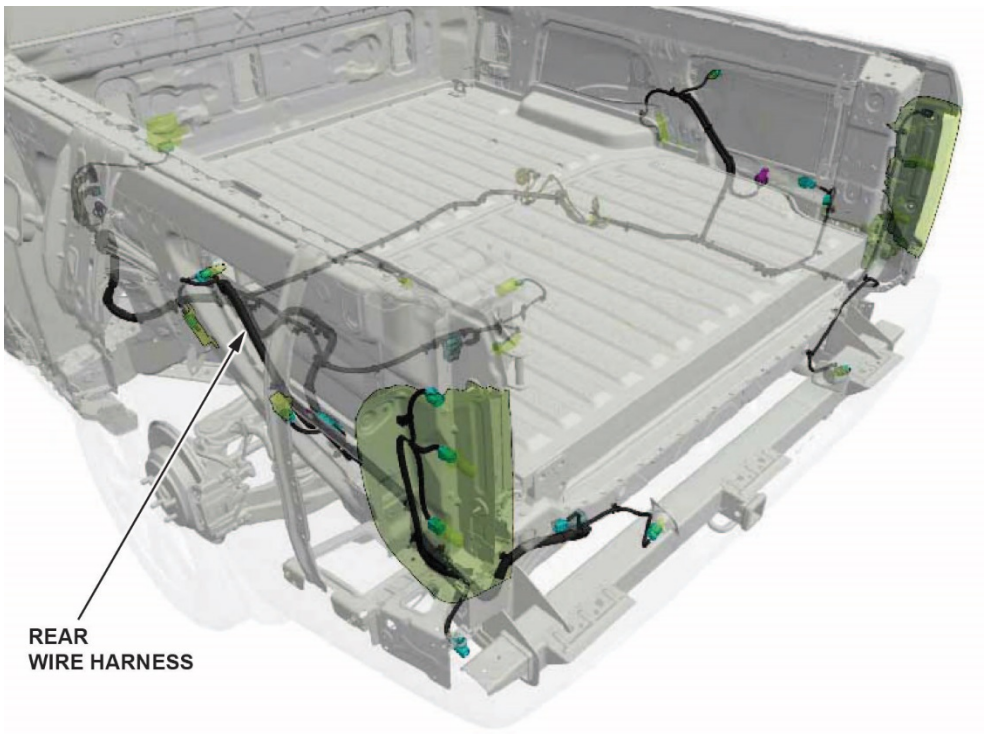
   NOTE: Check both male and female side of each connectors.

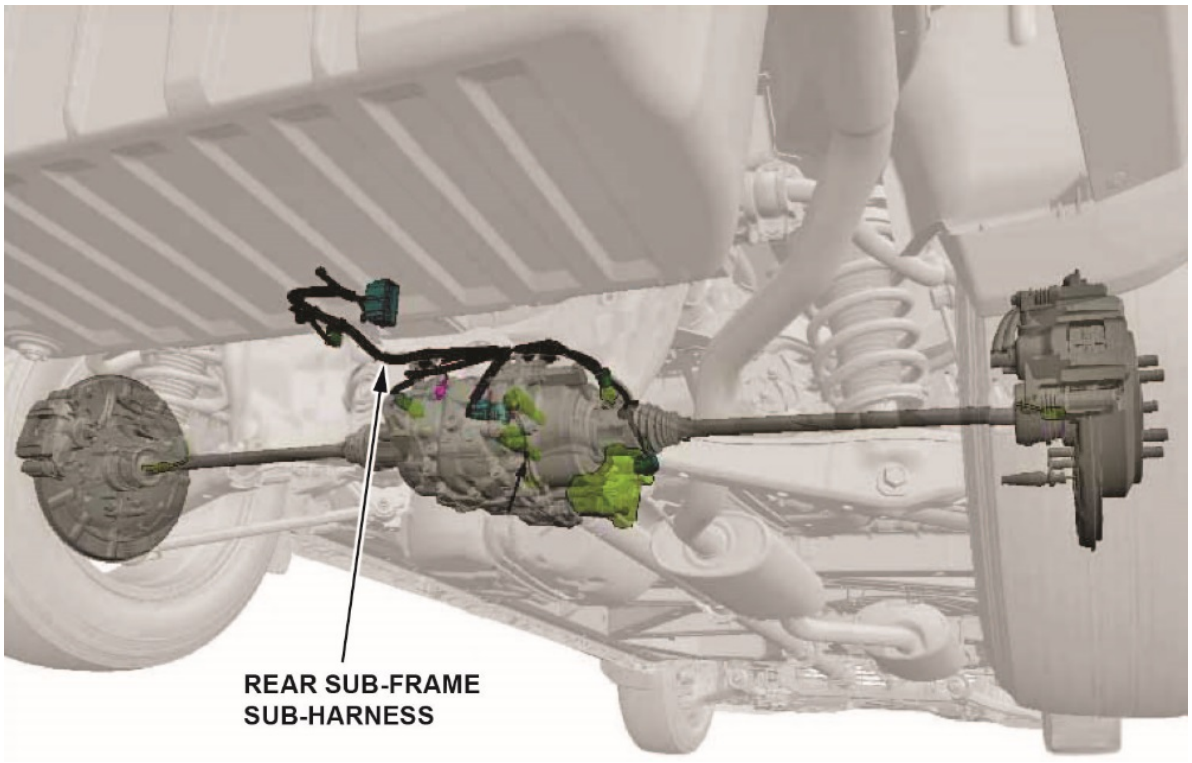
   - Differential oil pump motor connector
   - Left differential fluid pressure sensor connector
   - Right differential fluid pressure sensor connector
   - C313 (If there is corrosion found on the differential side of C313, the rear differential carrier assembly will need to be replaced.)
3. Check the following components/connectors for any water or corrosion. Replace any affected component if there is any **water** or **corrosion**.

   NOTE: Check both male and female side of each connectors.

   - Left rear wheel speed sensor connector
   - Right rear wheel speed sensor connector
4. Replace the rear wire harness and the rear subframe harness.

   NOTE: Replace the harness in short sections to route it exactly as the original harness.





5. Install the removed parts in reverse order.

   NOTE: Be sure to replace the clips on the left and right upper C-pillar trim.

6. Clear any set DTCs.

REPAIR PROCEDURE C

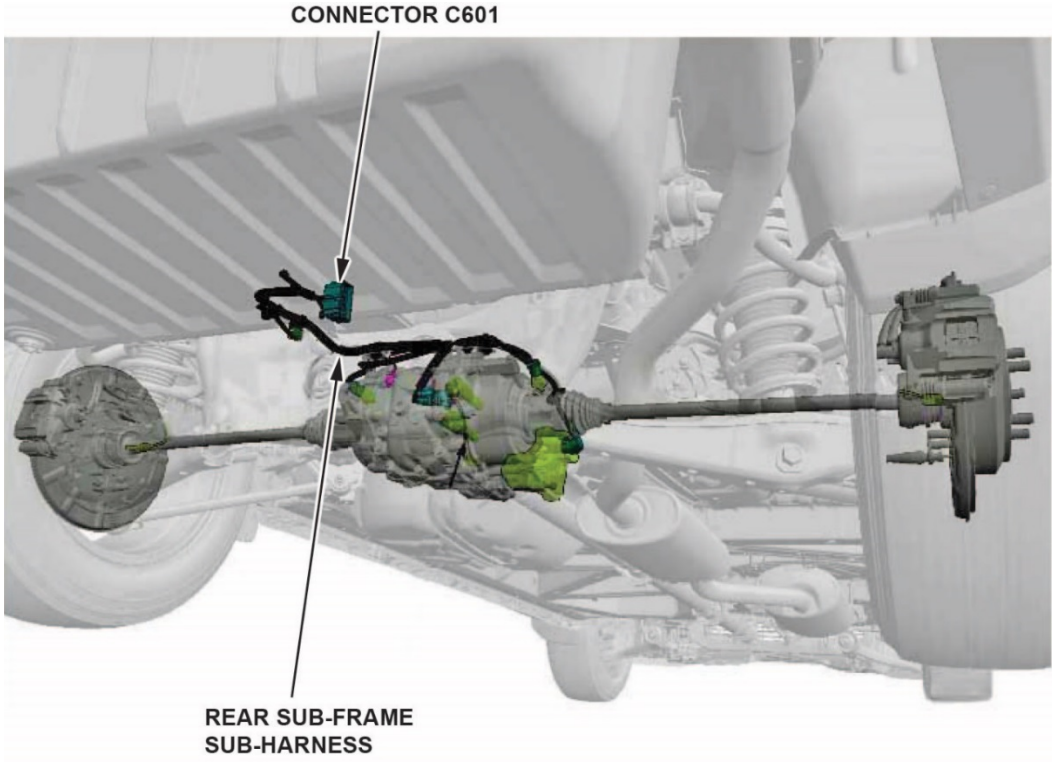
NOTE: This procedure covers vehicles that have already had a countermeasure rear wire harness installed based on the date listed on the rear wire harness.

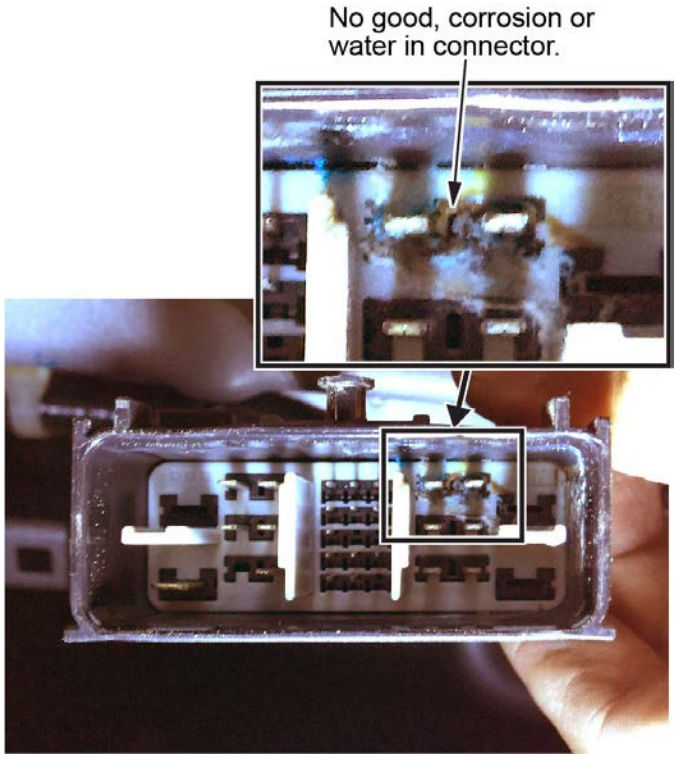
1. Disconnect connector C601 (rear wire harness/rear subframe harness), and inspect the interior of the connector and terminals on both the male and the female side for signs of water intrusion and/or corrosion.

   Is there water and/or corrosion inside the connector?

   Yes – Go to REPAIR PROCEDURE B.

   No – Go to step 2.





2. Check the following components/connectors for any water or corrosion. Replace any affected component if there is any **corrosion**. If there is water but no corrosion, dry it out and reuse the component.

   NOTE: Check both male and female side of each connectors.

   - Differential oil pump motor connector
   - Left differential fluid pressure sensor connector
   - Right differential fluid pressure sensor connector
   - C313 (If there is corrosion found on the differential side of C313, the rear differential carrier assembly will need to be replaced.)

3. Check the following components/connectors for any water or corrosion. Replace any affected component if there is any **water** or **corrosion**.

   NOTE: Check both male and female side of each connectors.

   - Left rear wheel speed sensor connector
   - Right rear wheel speed sensor connector

4. Replace the rear subframe harness even if there was no water or corrosion at C601.

   NOTE: Be sure to replace the must replace clips on the left and right upper C-pillar trim

5. Clear any set DTCs.

END