Safety Recall 4621B – 2020-2021 CX-30 Power Liftgate May Partially Lower Unexpectedly

1. VEHICLE INSPECTION PROCEDURE

Verify that the vehicle is within the following ranges:

| Models	Subject VIN range	Subject production date range
2020-2021MY CX-30	3MVDM**** LM 100116 - 140310 3MVDM**** MM 200017 - 232944	From October 1, 2019 through November 24, 2020

The asterisk symbol "*" can be any letter or number.
- If the vehicle is within the above ranges, proceed to **Inspection and Repair Procedure**

- If the vehicle is not within the above ranges, return vehicle to the customer or inventory.

Perform a Warranty Vehicle Inquiry using your eMDCS System and inspect vehicle for Campaign Label Recall 4621B attached to the vehicle's hood or bulkhead. Refer to eMDCS System - Warranty Vehicle Inquiry Results table below.

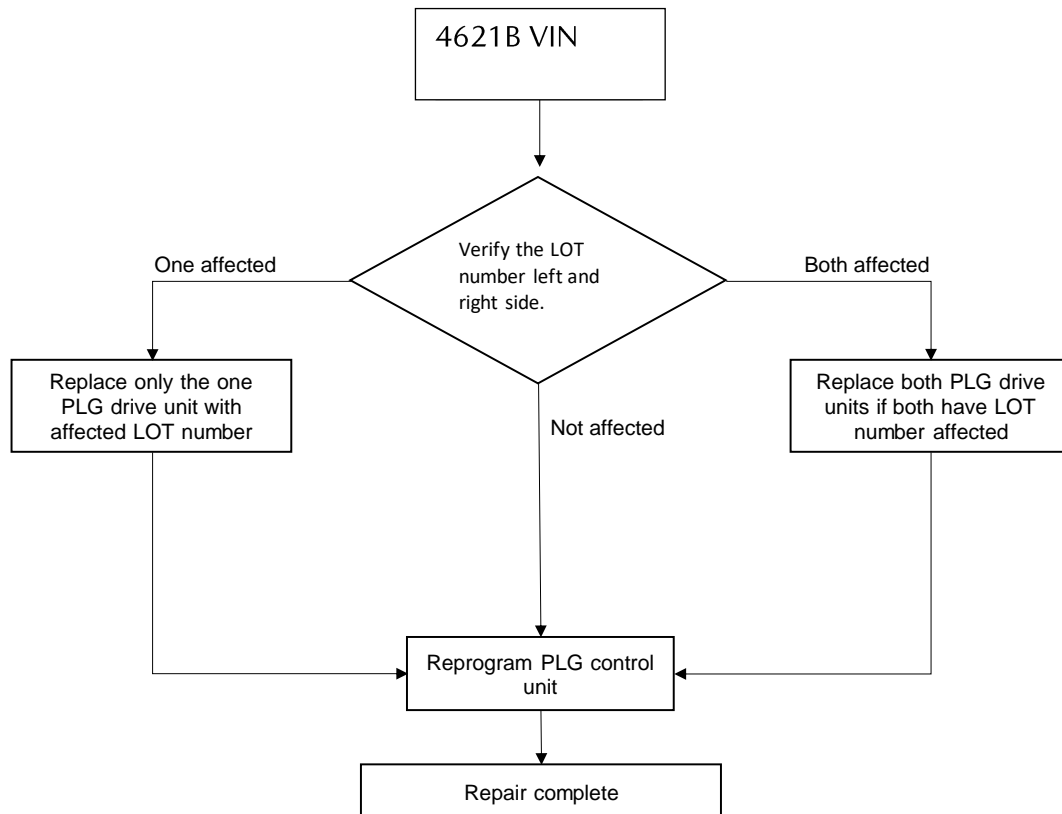NOTE: Be sure to verify Recall number as the vehicle may have multiple Recall labels.
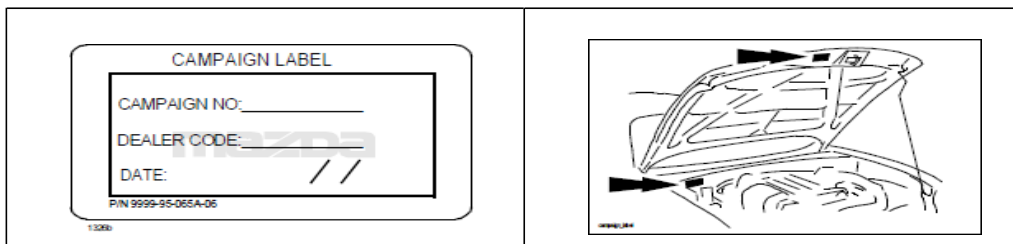
eMDCS System - Warranty Vehicle Inquiry Results:

If eMDCS displays:	Campaign Label is:	Action to perform:
RECALL 4621B OPEN	Present	Email Dealer Recall Help or Contact Warranty Hotline at (877) 727-6626 option 3 to update vehicle history.
	Not present	Proceed to "2. REPAIR PROCEDURE".
RECALL 4621B CLOSED	Present	Return vehicle to inventory or customer.
	Not present	Proceed to "3. CAMPAIGN LABEL INSTALLATION".
RECALL 4621B IS NOT PRESENT	Does not apply	Recall does not apply to this vehicle. Return vehicle to inventory or customer

Flow chart

NOTE: Follow the repair instructions, reprogram module first then replace affected drive unit if applicable.

```
                          ┌──────────────┐
                          │  4621B VIN   │
                          └──────┬───────┘
                                 │
                                 ▼
                              ╱      ╲
  One affected          ╱  Verify the LOT ╲          Both affected
◄──────────────────────    number left and   ──────────────────────►
                          ╲  right side.   ╱
                              ╲      ╱
                                 │
        ┌──────────────┐     Not affected     ┌──────────────┐
        │Replace only the│       │             │Replace both PLG│
        │one PLG drive   │       │             │drive units if  │
        │unit with       │       │             │both have LOT   │
        │affected LOT    │       │             │number affected │
        │number          │       │             │                │
        └──────┬─────────┘       │             └──────┬─────────┘
               │                 ▼                    │
               │      ┌──────────────────┐            │
               └─────►│ Reprogram PLG control│◄───────┘
                      │        unit          │
                      └──────────┬───────────┘
                                 │
                      ┌──────────▼───────────┐
                      │   Repair complete    │
                      └──────────────────────┘
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VERIFY THE CONTENTS OF THE MDRT TOOL KIT

CAUTION: The tool must be stored in your Mazda Tool Shed – any misplacement or failure to return the tool will result in a $1,000 charge to the dealer. If your tool does not work, please fill out the Dealer Recall Help Form on MXConnect with the reason of tool failure AND the TOOL BARCODE # (see below).

Section B: Repair Procedure

Outline of Repair Procedure

A. **Verify the LOT No. of the PLG drive units**
B. **Replace the affected PLG drive unit**

1. Open the Liftgate and write down the 8 Digit Lot Number
2. There is a number (9 or 0 indicates year) followed by a letter (Indicates month) and 6 numbers. Input all 8 digits into the Lot Number calculator or an error will occur.   Note: If there is no number before the letter, input 9 (2019 production). Example : G050032 →9G050032
3. If the result is Not Affected replacement is not required. Reprogram power liftgate module with supplied SSPC5/4621B MDRT. This will be 96% of the vehicles.
4. If the result is Affected, write down the affected side Left, Right, or Both, Contact Dealer Recall Help with the Affected Lot number. They will verify and order the part. Proceed to MDRT reprogramming and then to Replacement of the PLG Drive Unit "C".
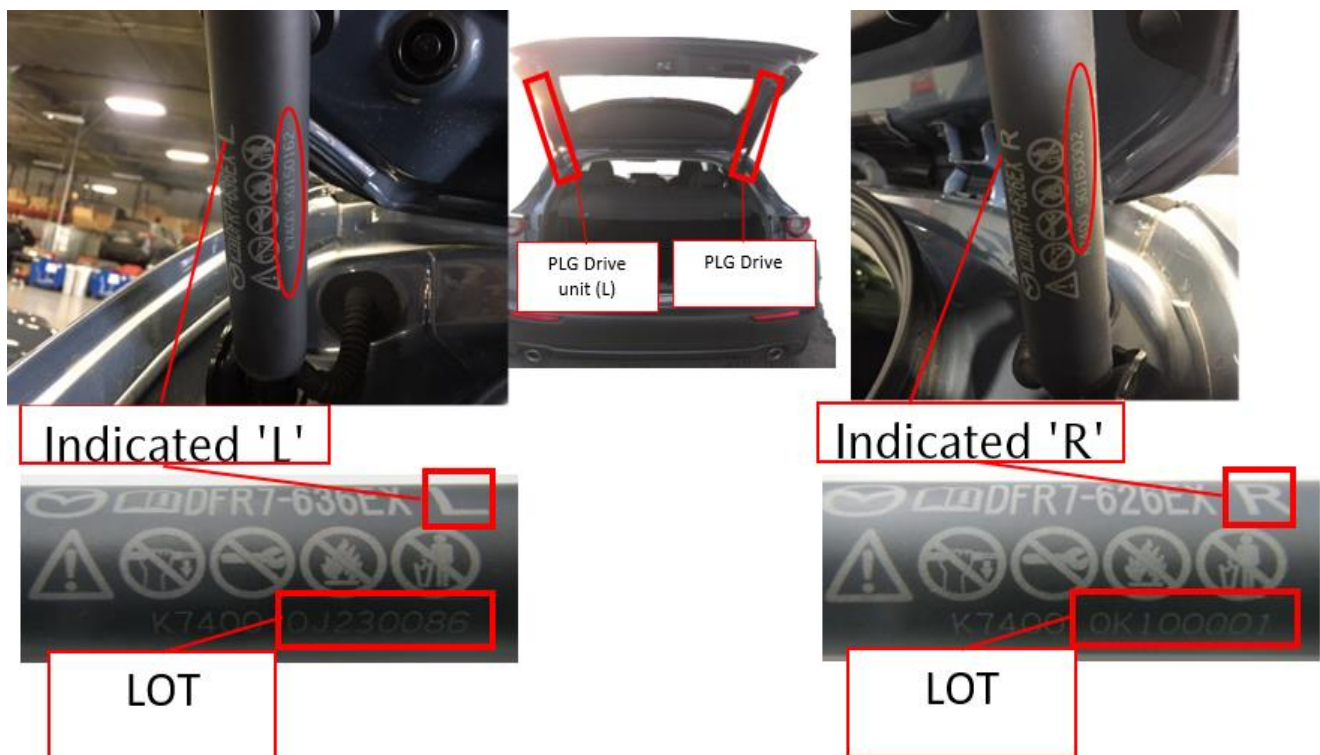
Location	LOT (8-digit half-width input)	Result
L	9f230086	NOT AFFECTED

Location	LOT (8-digit half-width input)	Result
R	0k100001	NOT AFFECTED

Remember to use the 4621B LiftGate Lot Inspection Calculator

This is a different Calculator than the "Repair Calculator"

Proceed to MDRT Programming

Service Caution for Reprogramming

Do NOT touch the MDRT while Green or Blue light is blinking with frequent beep sound.
- During reprogramming operation, center display and instrument cluster may blink. This is NOT abnormal.
- If procedures are not followed, <mark>the MDRT can cause an error DTC before</mark> reprograming. If the tool is erased, you may have to perform other USB updates again.
- DTC P:2610 may stored after reprogramming. Turn the engine-on and stay 5 seconds on idle. After then turn IG-OFF. Turn IG-ON and re-connect the MDRT. <mark>MDRT will erase the DTC</mark> automatically.

NOTE: Poor connection between the vehicle and MDRT and/or low voltage may result in abnormal termination and/or data corruption.

a. During reprogramming, connect the DCA8000 battery charger using the Reflash mode

b.

c.

Before reprogramming, pay attention to the vehicle condition and PC environment.

a. Turn off all the electrical loads, especially pay attention to A/C (blower), audio, rear defogger and headlights.

b. Perform self-test and verify no DTC is stored. If any DTC is stored, fix the concern and delete the DTC.

c. Disconnect all non-genuine aftermarket accessories.

<div style="border:1px solid black; text-align:center;">

PLG Power Lift Gate

</div>

A. Reprogram the PLG (Power Lift Gate) Module

NOTE: If you suspect your MDRT Tool is bad or need an additional Tool, please contact   Dealer Recall Help on MXConnect > Warranty with at least 1 VIN AND the Tool Barcode Number.

1. Thoroughly read the service cautions on the prior pages to avoid module damage!

MDRT TOOL - TOOL WILL HAVE A XXXXXX STICKER

NOTE: If any of warning lamp illuminates or flashes in the instrument cluster, repair it according to the Workshop Manual before reprogramming using the MDRT for this campaign.

1. Switch the ignition to off.
2. Connect MDRT to the OBDII connector.
    Note: Wait until the green/blue and the red LED turn on with "Ready" and "IG OFF" on the display,
        go to next step.
3. Switch the ignition to on (Engine Off position)
4. Monitor the MDRT display.

Note:
- The reprogramming needs approximately 30 minutes to complete. (Pulsing beeps will sound during the reprogramming)
- When the reprogramming has successfully done, the display shows "Repro OK" and bottom row will illuminate intermittently, and the green or blue LED will be blinking.
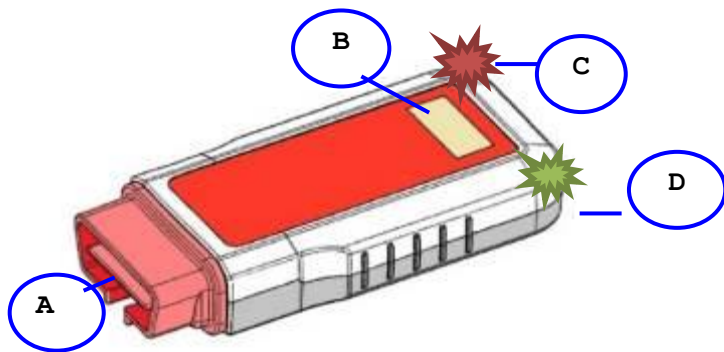
A	OBDII connector
B	Display
C	LED light (Red)
D	LED light (Green or Blue)

LED lights show the configuration status.

*There are two LED types for MDRT.
1. Green & Red (Serial number up to 02217)
2. Blue & Red (Serial number after 02218)

Handling Caution

Take care when handling the MDRT tool to avoid damage
- Avoid exposing it to high heat.
- Avoid exposing it to water.

To avoid module damage during reprogramming.
- Do not connect MDRT tool with the ignition on
- Do not disconnect MDRT from OBDII connector.
- Do not start engine.
- Do not turn IG-Off.

Otherwise a module replacement may be required.

NOTE
When performing reprogramming with an MDRT:
- Verify that the room fuse is installed.
- Turn off all electric-type loads such as air-conditioning or the audio system and then connect battery charger.
- Do NOT touch the MDRT while Green or Blue light is blinking or when you hear a "beep" sound.
- During the reprogramming operation, the center display and instrument cluster may blink, which is NORMAL.

SECUL_NG

Displayed **'SECUL_NG'**
-Restart from '#1 Switch the ignition to off' and complete reprogram.

REPRO_OK
XXXX-X

Displayed **'REPRO_OK**
-Confirm the FILENAME and Suffix and proceed '#5 Switch the ignition to off '

#5. Turn the ignition off.
#6. Disconnect the MDRT.

Please refer to the chart
' Displayed message after
reprogramming' below.

Displayed message after reprogramming			
Country	Model	Software type	Suffix

Refer to troubleshooting chart if display reads other than REPRO_OK or SECUL_NG.
  o **Do not disconnect until the ignition is off under any circumstance.**
  o **Do not turn off ignition until programming is complete.**
  o **Do not start vehicle during programming.**

How to verify the reprograming results by display
Confirm that the display shows a message after completing reprogramming.

Display

Repro OK
XXXX

Repro OK
XXXX-X

Software type

Suffix

XXXX

X
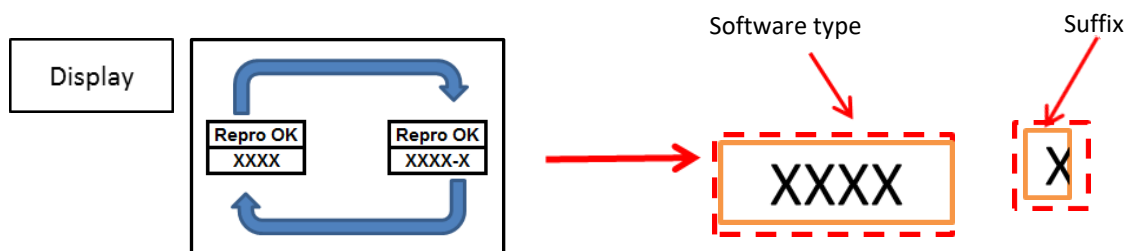
Lower message on the display indicates each of the soft type & suffix

If a suffix becomes higher, Reprogramming is completed.

Troubleshooting
  The number is related to the step number in the reprogramming procedure.
  Text in **bold** mean the most possible cause.

No.	Technician's operation	Vehicle status	MDRT status	LED status		Beep sound	Display
3-1	IG-ON	IG-ON	**MDRT malfunction.**	G or B	Off	Continuously beeping	Data Fail
				R	Illuminate		
3-2	**IG-ON with MDRT not securely connected**	IG-ON	No power supplied.	G or B	Off	No beep	
				R	Off		
4-1	IG-ON	**Not a subject vehicle**	MDRT can't identify vehicle. MDRT performs only	G or B	Off	Continuously beeping	VIN_NG
				R	Blinking at intervals of 1 sec		No Target

			deleting DTC.					
4-2	IG-ON	IG-ON Batt. Voltage: 11 V or lower SOC: 75 % or lower	Check battery voltage. Stop reprograming.	G or B	Off	Continuously beeping	Repro NG	
				R	Blinking at intervals of 1 sec		BATCHK	
4-3	Poor MDRT connection during reprograming	IG-ON	No power supplied.	G or B	Off	No beep		
				R	Off			
4-4	Monitoring MDRT	IG-ON	Finish reprograming DTCs have been detected	G or B	Illuminate	Pulsing beeps	Rep Succ	
				R	Blinking at intervals of 1 sec		DTC!!	
4-5	IG-ON	IG-ON Reprograming failed	Verify reprograming result.	G or B	Off	Continuously beeping	Repro NG	
				R	Illuminate		XXXXX	

NOTE

In case of "No. 4-1", verify the vehicle is subject to the SSPC5.

In case of "No. 3-1", it may be caused by one of the following concerns: (see below)

- Data in the Module is broken. The possible causes are as follows.
    1. MDRT has been connected to the OBDII connector with the IGN already turned on.
    2. MDRT has been disconnected from OBDII connector during reprograming.
    3. Engine has been started or IG is turned off during reprograming.
        - MDRT malfunctions.
            • Verify the current file name in the vehicle by log view screen.

<u>Check procedures after reprogramming</u>

Check for DTC and confirm there is no stored DTC.
• DTC P2610:00 may be stored. If so, please start the engine and clear the DTC. NOTE:
DTC U2120:00, U2030:51 or/and U2500:82 (Related DTCs of Forward sensing
camera) may be stored and i-ACTIVSENSE warning light (amber) may turn on after driving. These
DTCs may not be stored just after reprograming. It may be stored after driving. To avoid stored
DTC, you need to put the FSC into sleep mode.

SECTION C. REPLACEMENT OF THE PLG DRIVE UNIT – Dealer Recall Help Approved and Ordered Part

Caution: Please review the supplemental video for this repair.

1. Move both front seats all the way to the front. Disconnect the negative battery terminal. (See NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION [(E)].)
2. **Remove the left and right-side assist handles**.
    - Insert a tape-wrapped flathead screwdriver into the service hole and remove the assist handle covers.
    - The assist handle covers need to be pulled straight out from the handles. Do not pry off like a cap.

ILLUSTRATION INDICATES LEFT SIDE. (RH SIDE IDENTICAL)
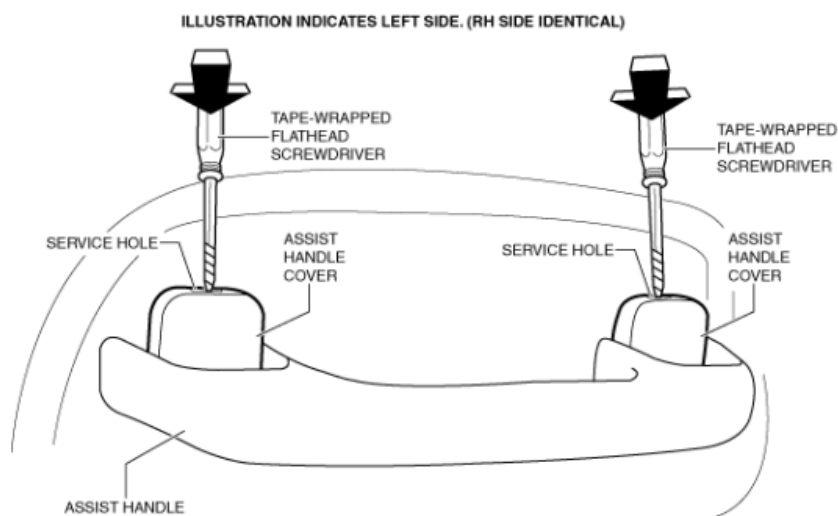
    - Pull the assist handle in the order of arrows (1) and (2) shown in the figure and remove it while detaching the clips.

ILLUSTRATION INDICATES LEFT SIDE. (RH SIDE IDENTICAL)
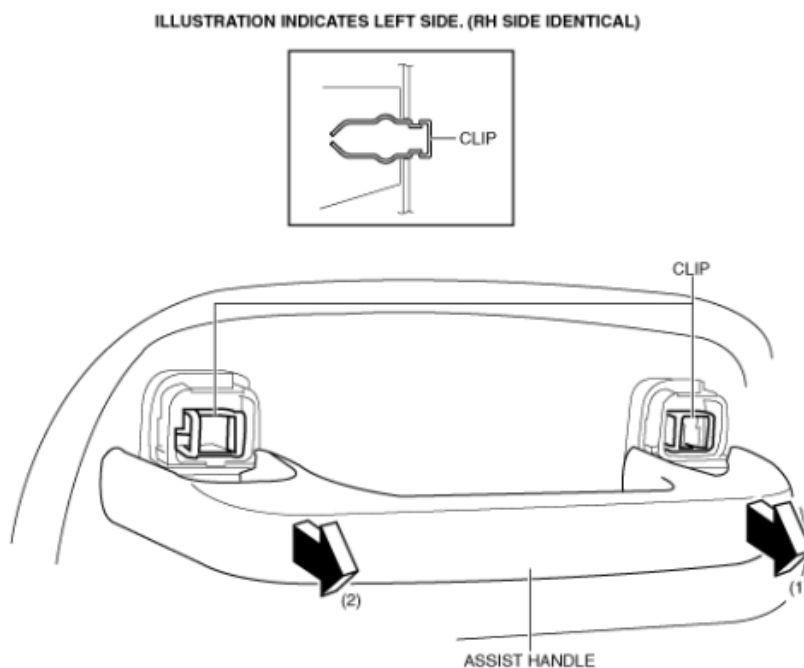
3. Remove the upper part of the rear door seaming welt partial from the body among the top ceiling, the B-Pillar trim area and the C-Pillar trim area.

4. Remove the B-Pillar upper trim on both sides.
    To do so the belt adjustor must be moved to lowest position.
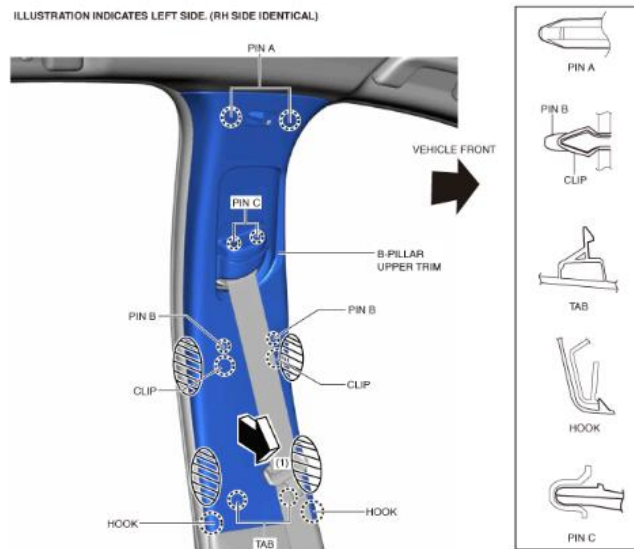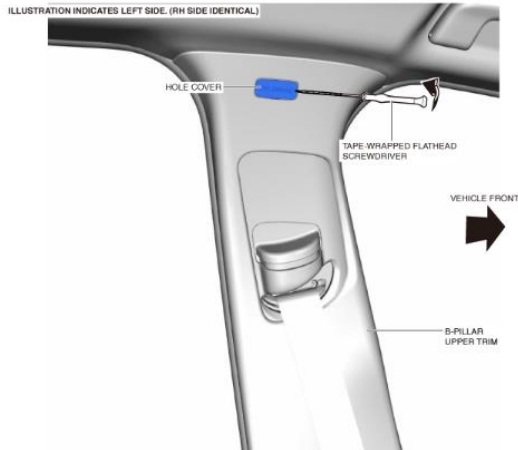
5. Fold the rear seat bench down.
6. Remove the rear package tray.

7. **Pull both sides of the trunk side upper trim** in the order of arrows (1), (2), and (3) shown in the figure, and remove it while detaching the clip and hooks.
    Note: It is not necessary to peel back the weatherstrip.

ILLUSTRATION INDICATES LEFT SIDE. (RH SIDE IDENTICAL)

TRUNK SIDE UPPER TRIM

◯ : CLIP [R]   △ : HOOK
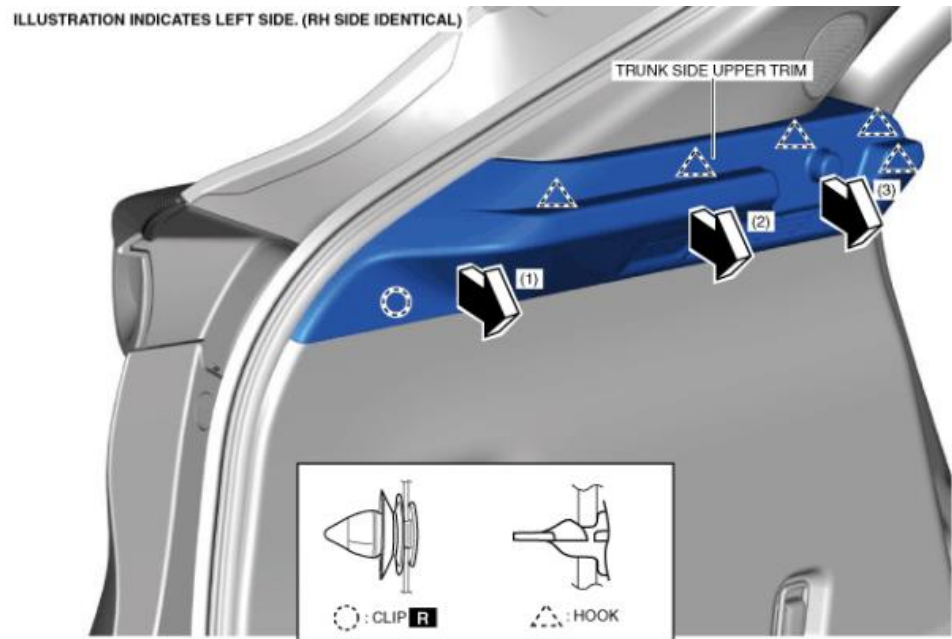
8. Disconnect the cargo room light connector. (LH only)
9. Disconnect the speaker connector. (with Bose®)
10. **Pull both sides of the C-pillar trim** in the direction of the arrow in the order of (1), (2) while detaching clip A, clips B, clips C and clips D.

Note : It is not necessary to peel back the weatherstrip.
NOTE:- Clips (R part) must be replaced at C-pillar trim and trunk side upper trim.

ILLUSTRATION INDICATES LEFT SIDE. (RH SIDE IDENTICAL)

CLIP B

C-PILLAR TRIM

[R] CLIP D

CLIP C

CLIP B

CLIP A

INNER PANEL   INNER PANEL
INNER PANEL   INNER PANEL
CLIP A   CLIP B   CLIP C   [R] CLIP D
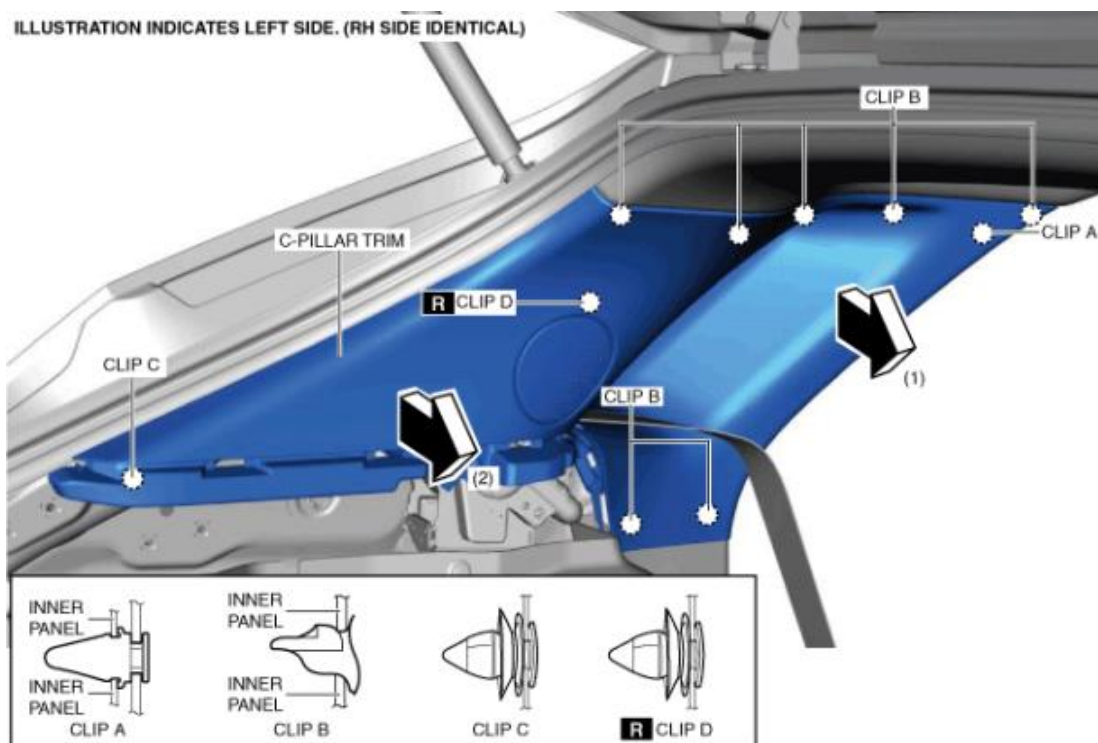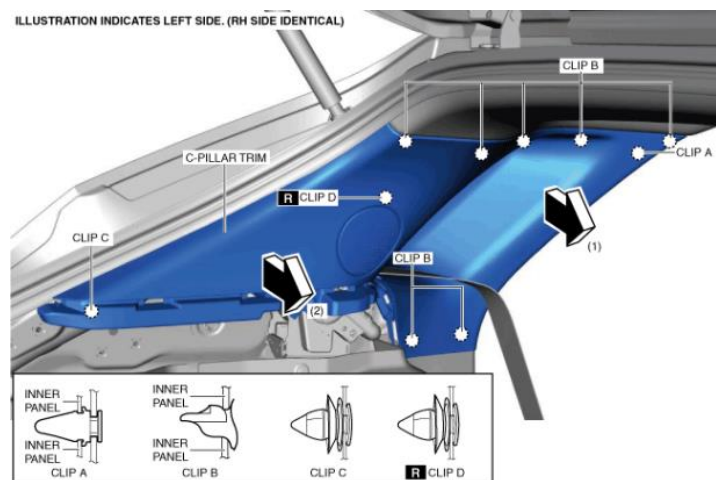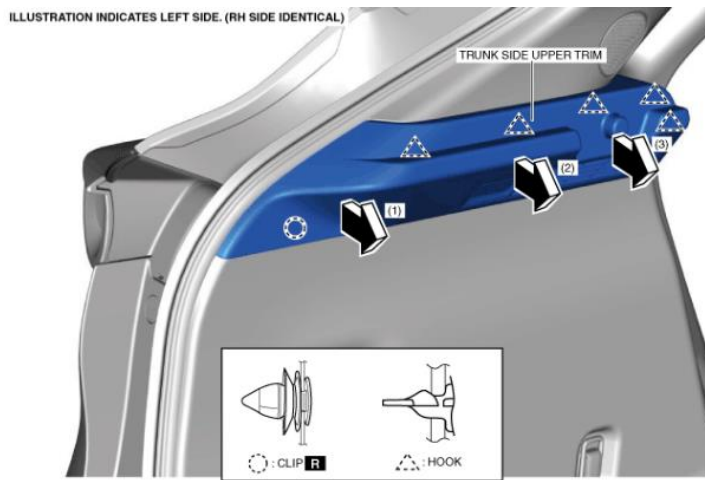
11. <u>Peel up the weatherstrip slightly from the headliner to locate the rear headliner clips, but avoid removing from the body</u>.
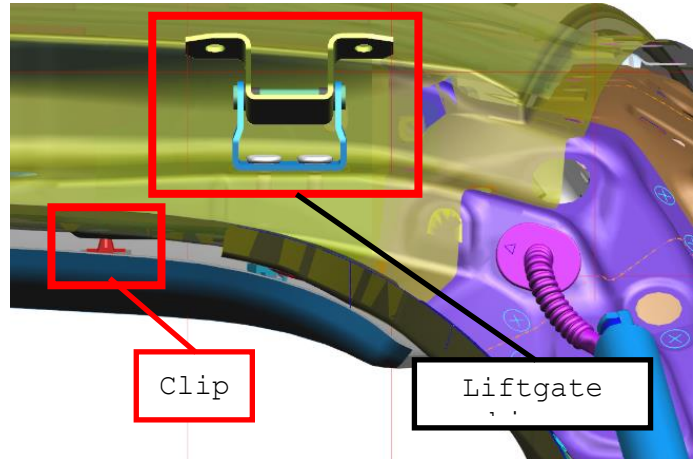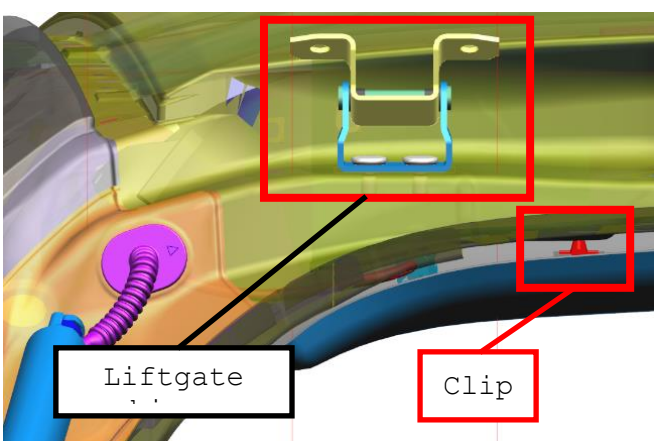
LH side.

RH side, there is the clip next to the bundled wire harness.


Clip
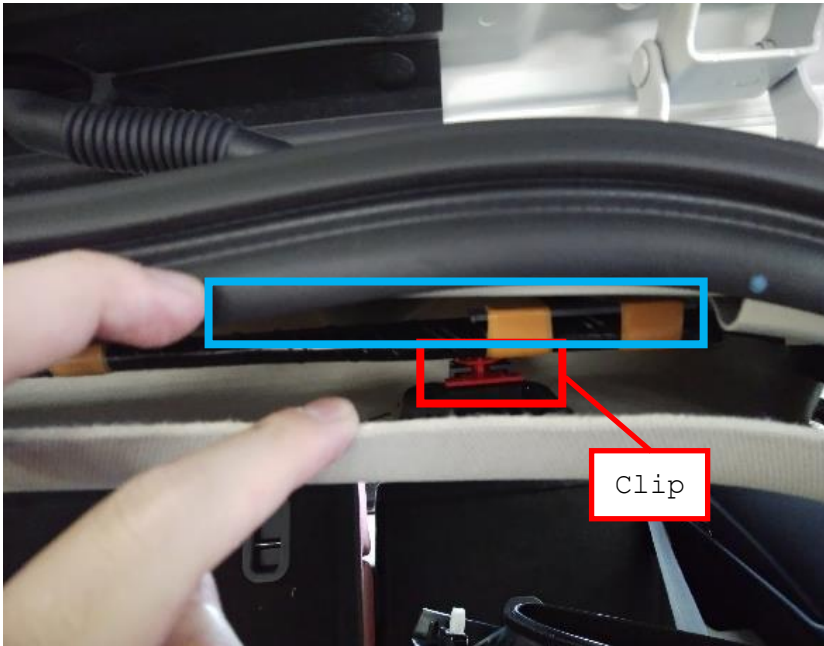
12. It is not necessary to peel back the weatherstrip completely.
13. Detach the rear of the top ceiling from the roof panel on both sides. To detach insert a flat lever or similar tool between top ceiling and roof panel, and carefully release the two red clips. Do not pry against the wire harness (RH)

Detached top ceiling at its rear end

Caution: **The headliner must not be lowered more than 5.0 cm or 1.97 inches between the headliner and weatherstrip seam for this next step!** If you exceed 5.0 cm or 1.97 inch, the headliner will deform, break, or wrinkle. Damage to the headliner is not covered under this recall or warranty.
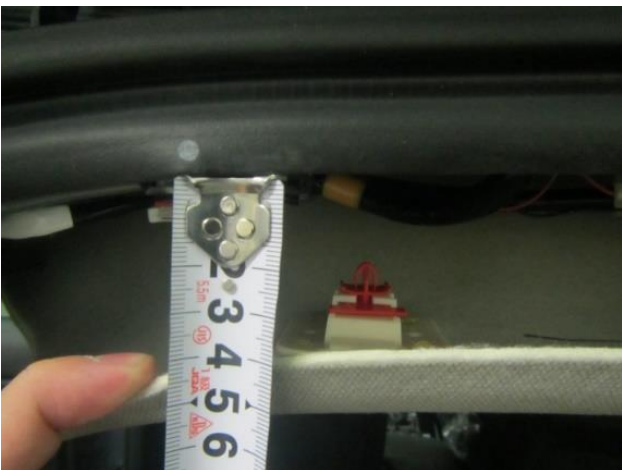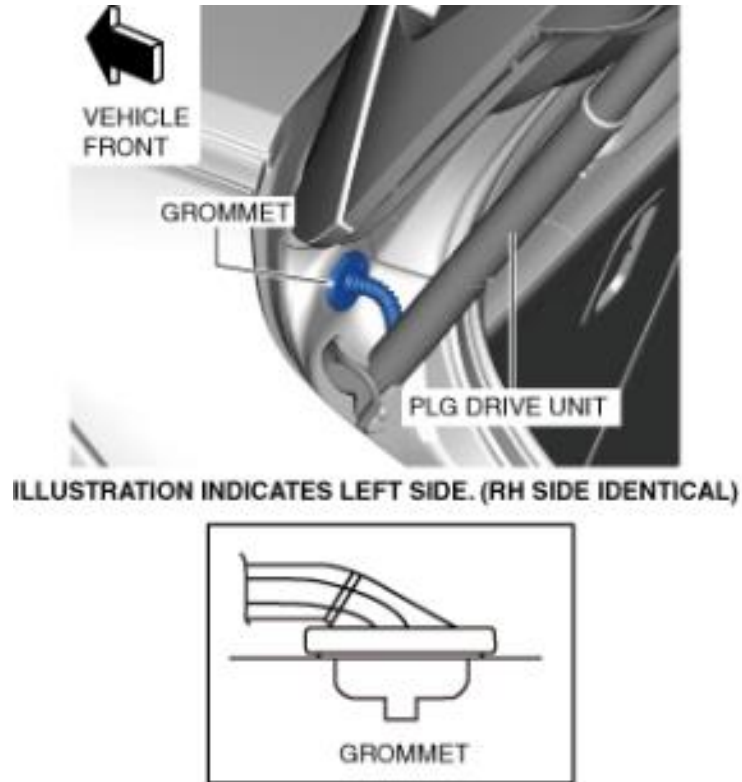
14. Remove the PLG drive unit connector **for the affected side**.
    Location of the connector
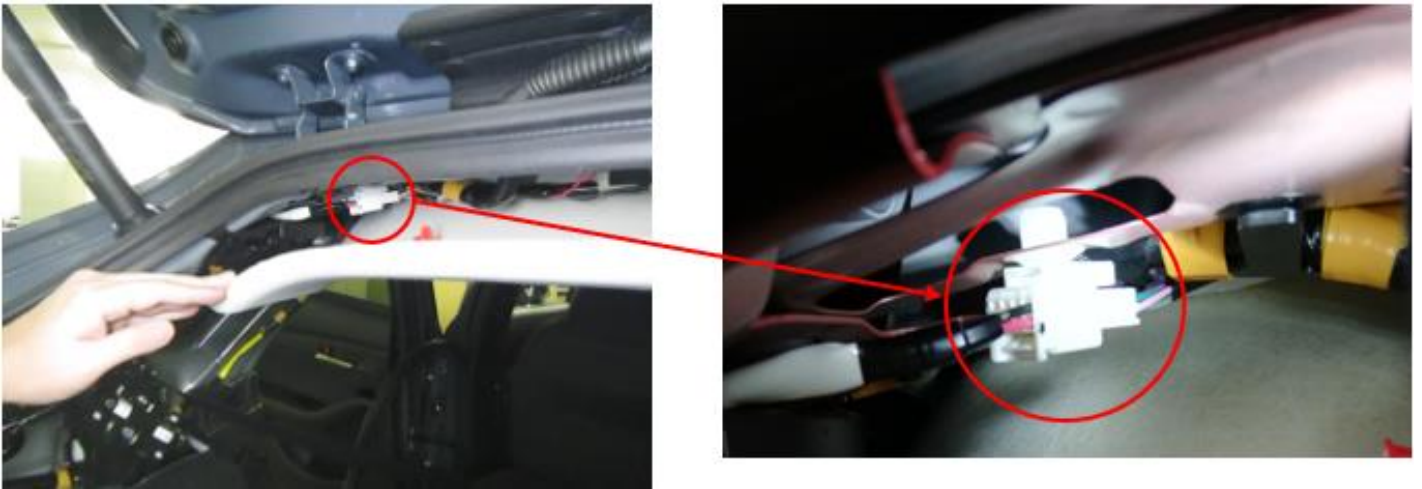
15. Hold the headliner with one hand and remove the connector with other hand.
   **Do not lower more than 1.97″ or 5 cm!**
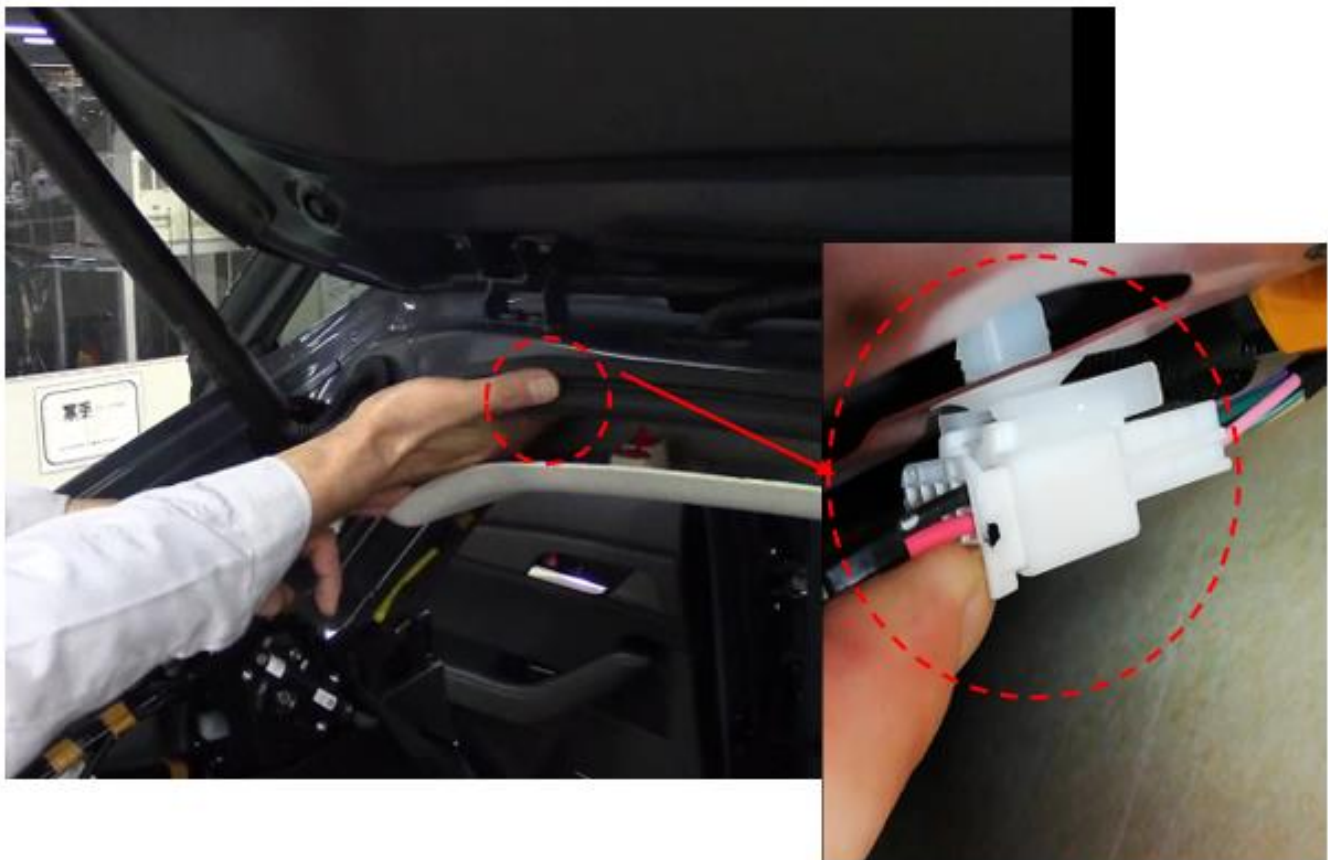
16. Remove the grommet of PLG drive unit.

17. Peel back the grommet rubber first, then release the 4 claws detailed in the photo with 4 circles using a remover. Then remove the wiring harnesses from the body panel.

Note:
Remove the grommet rubber by fingers if possible. If it's difficult, do not use a screwdriver to remove it but use pliers instead:
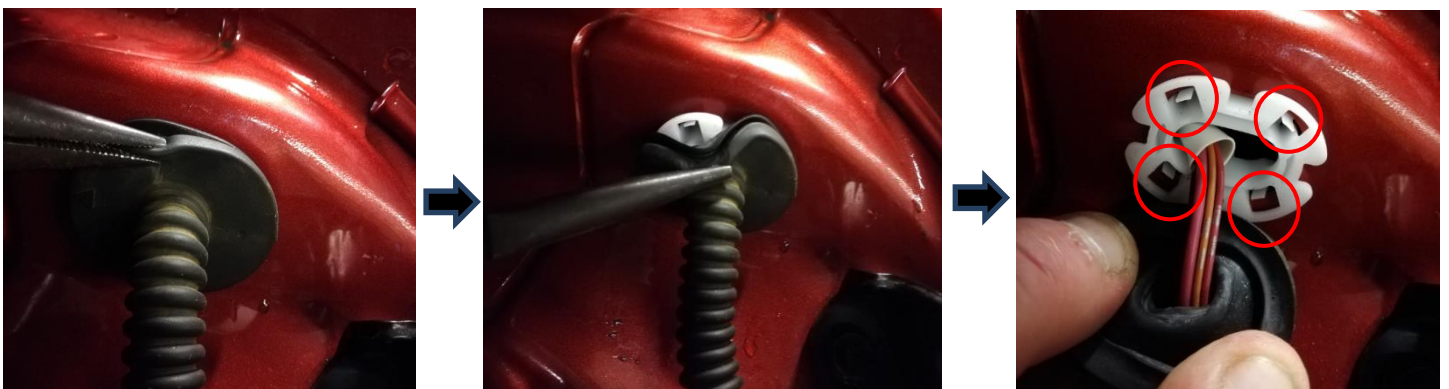
Warning: Remove the PLG drive unit securing band using two people, one person supports the liftgate. If the PLG drive unit securing band is removed without supporting the liftgate, it may fall off or close suddenly and cause injury.

18. Have a second person to hold and secure the open liftgate during loosening and replacing the PLG drive unit in the actual position.
19. Insert a removal tool into the position shown in the figure. Move the removal tool in the direction of the arrow shown in the figure and remove the securing band.
     NOTE: It is not necessary to remove and replace the bracket
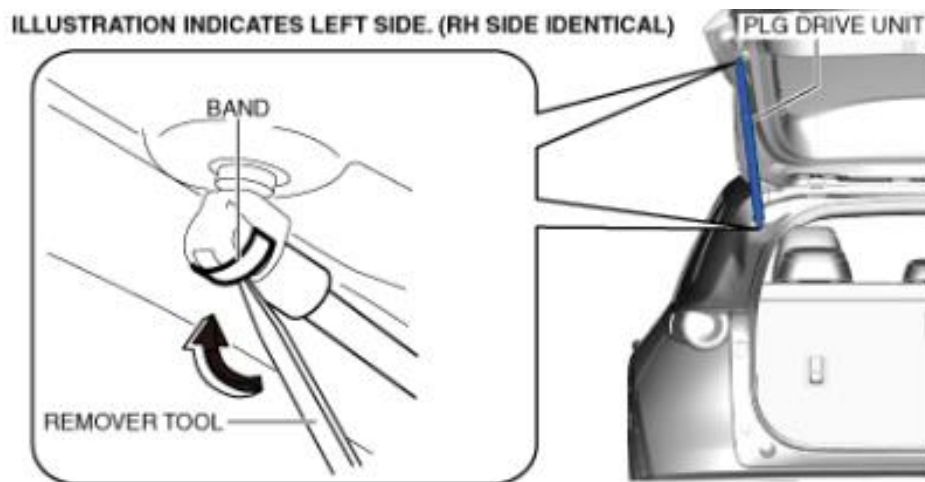
20. Remove the PLG drive unit (with affected LOT number) and install new updated PLG drive unit.
21. Install in the reverse order of removal.
- Make sure the headliner has no damage (or wrinkle) around assist handle, or interference with the trim after installation.

CAMPAIGN LABEL INSTALLATION:

1. Fill out a blue "Campaign Label" (9999-95-065A-06) with Campaign No: "4621B", your dealer code, today's date.

2. Affix it to the hood or bulkhead as shown:
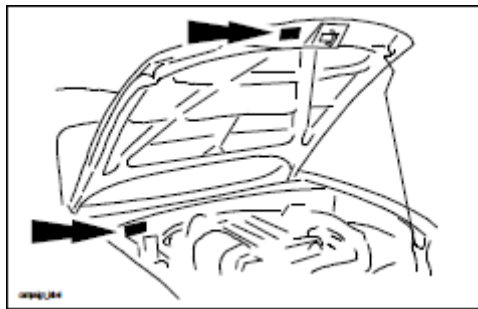

3. Return the vehicle to customer.

END OF REPAIR PROCEDURE