

TECHNICAL INSTRUCTIONS

FOR

SAFETY RECALL 23TA12

Front Lower Bumper Cover Assembly May Detach While Driving

CERTAIN 2020-2023 MODEL YEAR HIGHLANDER AND HIGHLANDER HV

Updated

4.2.2024 - Removed Marker Tool Set

4.11.2024 – Flowchart, Parts Section, Components Section – Part B and Part C, Section VI – Step 5, Section VII – Step 1

4.16.2024 – Parts Section

5.30.2024 – Flow chart, Step 5 Flow chart, and Section XI has been added.

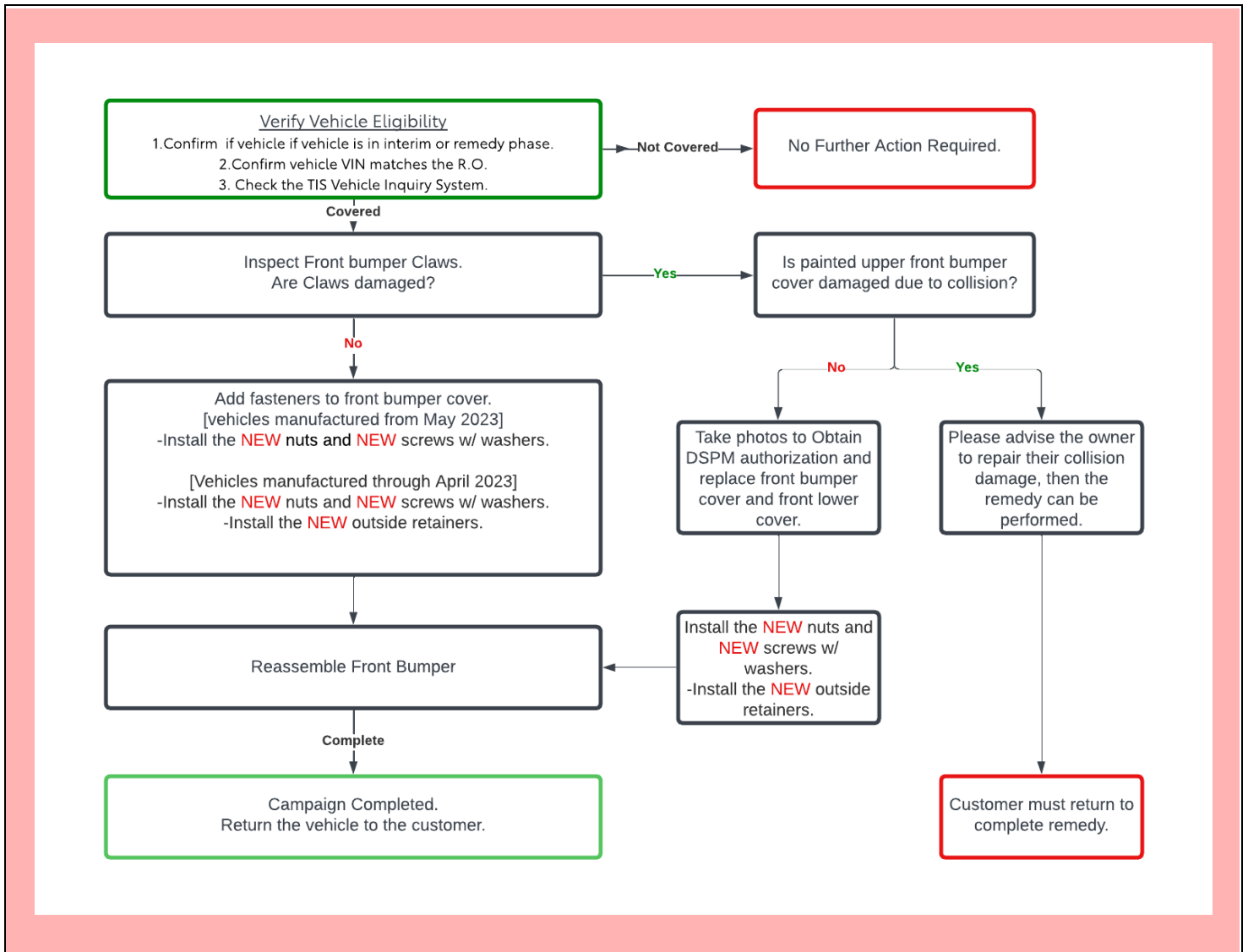
The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this repair are required to successfully complete the most current version of the E-Learning course “Safety Recall and Service Campaign Essentials”. To ensure that all vehicles have the repair performed correctly; technicians performing this repair are required to have currently completed the following courses:

TIC206A – Toyota Electrical Circuit Diagnosis

Always check which technicians can perform the repair by logging on to <https://www.uotdealerreports.com>. It is the dealership’s responsibility to select technicians with the above course completed to perform this repair. Carefully review your resources, the technician’s skill level, and ability before assigning technicians to this repair. It is important to consider technician days off and vacation schedules to ensure there are properly trained technicians available to perform this repair at all times.

I. Y OPERATION FLOW CHART

The flow chart is for reference only. **DO NOT** use it in place of the full technical instructions. Follow **ALL** steps as outlined in the full technical instructions to confirm the campaign is completed correctly.



II. IDENTIFICATION OF AFFECTED VEHICLES

1. CHECK VEHICLE FOR CAMPAIGN ELIGIBILITY

- Compare the vehicle's VIN to the VIN listed on the Repair Order to ensure they match.
- Check the TIS Vehicle Inquiry System to confirm that the VIN is involved in this Campaign and has not already been completed.

HINT: TMNA warranty will not reimburse dealers for repairs completed on vehicles that are not affected or were previously completed, even by another dealer

III. PREPARATION

1. PARTS

If the Inspection Result is **OK**
(Production Range through 4/2023)

Part Description	Part Number	Quantity	Remarks
NUT, SPRING SET	04003-4510E	1	-
SCREW, W/ WASHER TAPPING SET	04003-5010E	1	-
OUTSIDE MOULDING RETAINER SET	04003-4810R	1	-

(Production Range from 5/2023)

Part Description	Part Number	Quantity	Remarks
NUT, SPRING SET	04003-4510E	1	-
SCREW, W/ WASHER TAPPING SET	04003-5010E	1	-

If the Inspection Result is **NG**

Part Description	Part Number	Quantity	Remarks
COVER, FRONT BUMPER	52119-0E980	1	w/o intuitive Parking Assist System
COVER, FRONT BUMPER	52119-0E981		w/ intuitive Parking Assist System
COVER, FRONT BUMPER LOWER	52129-0E071	1	V6 & HV Non-Platinum Grade
COVER, FRONT BUMPER LOWER	52129-0E101		V6 & HV Platinum Grade
COVER, FRONT BUMPER LOWER	52129-0E191		I4 Non-Platinum Grade
COVER, FRONT BUMPER LOWER	52129-0E201		I4 Platinum Grade
SCREW, W/WASHER TAPPING	90159-A0060	4	-
NUT, SPRING	90183-05050	4	-
OUTSIDE MOULDING RETAINER SET	04003-4810R	1	-
FRONT FENDER WHEEL OPENING MOULDING CLIP	75867-68010	4	-
CLIP, ULTRASONIC SENSOR	89348-50050	4	w/ Intuitive Parking Assist System
RETAINER, ULTRASONIC SENSOR, FRONT CENTER	89348-0R100	2	w/ Intuitive Parking Assist System
RETAINER, ULTRASONIC SENSOR, FRONT CORNER	89348-48160-A0	2	w/ Intuitive Parking Assist System
RETAINER, ULTRASONIC SENSOR, FRONT CORNER	89348-48160-A3		

RETAINER, ULTRASONIC SENSOR, FRONT CORNER	89348-48160-B0		
RETAINER, ULTRASONIC SENSOR, FRONT CORNER	89348-48160-B1		
RETAINER, ULTRASONIC SENSOR, FRONT CORNER	89348-48160-B2		
RETAINER, ULTRASONIC SENSOR, FRONT CORNER	89348-48160-C0		
RETAINER, ULTRASONIC SENSOR, FRONT CORNER	89348-48160-D0		
RETAINER, ULTRASONIC SENSOR, FRONT CORNER	89348-48160-E0		
RETAINER, ULTRASONIC SENSOR, FRONT CORNER	89348-48160-G0		
RETAINER, ULTRASONIC SENSOR, FRONT CORNER	89348-48160-J0		

2. TOOLS & EQUIPMENT

a) If the inspection result is **OK**.

• Standard Hand Tools	• Torque Wrench
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b) If the inspection result is **NG**.

• Standard Hand Tools	• Techstream / GTS+	• Torque Wrench
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3. MATERIALS

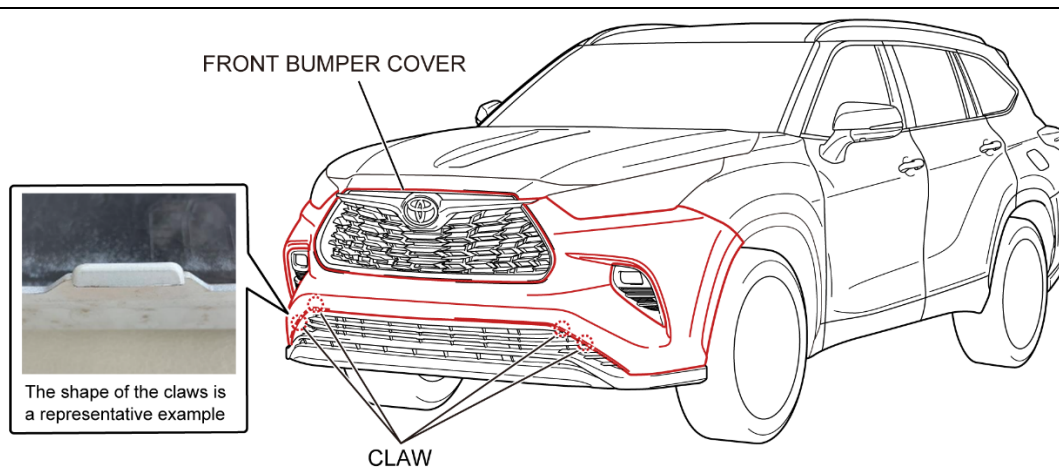
a) If the inspection result is **OK**.

• Protective Tape	• Protective gloves	• Marker
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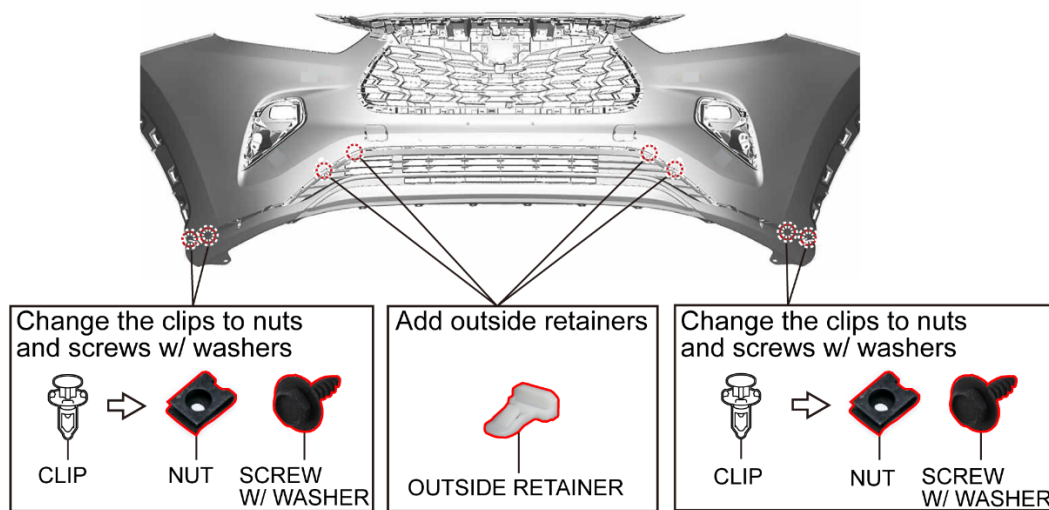
b) If the inspection result is **NG**.

• Protective Tape	• Protective gloves	• Marker
• Weight with a Pointed Tip	• String	

IV. BACKGROUND



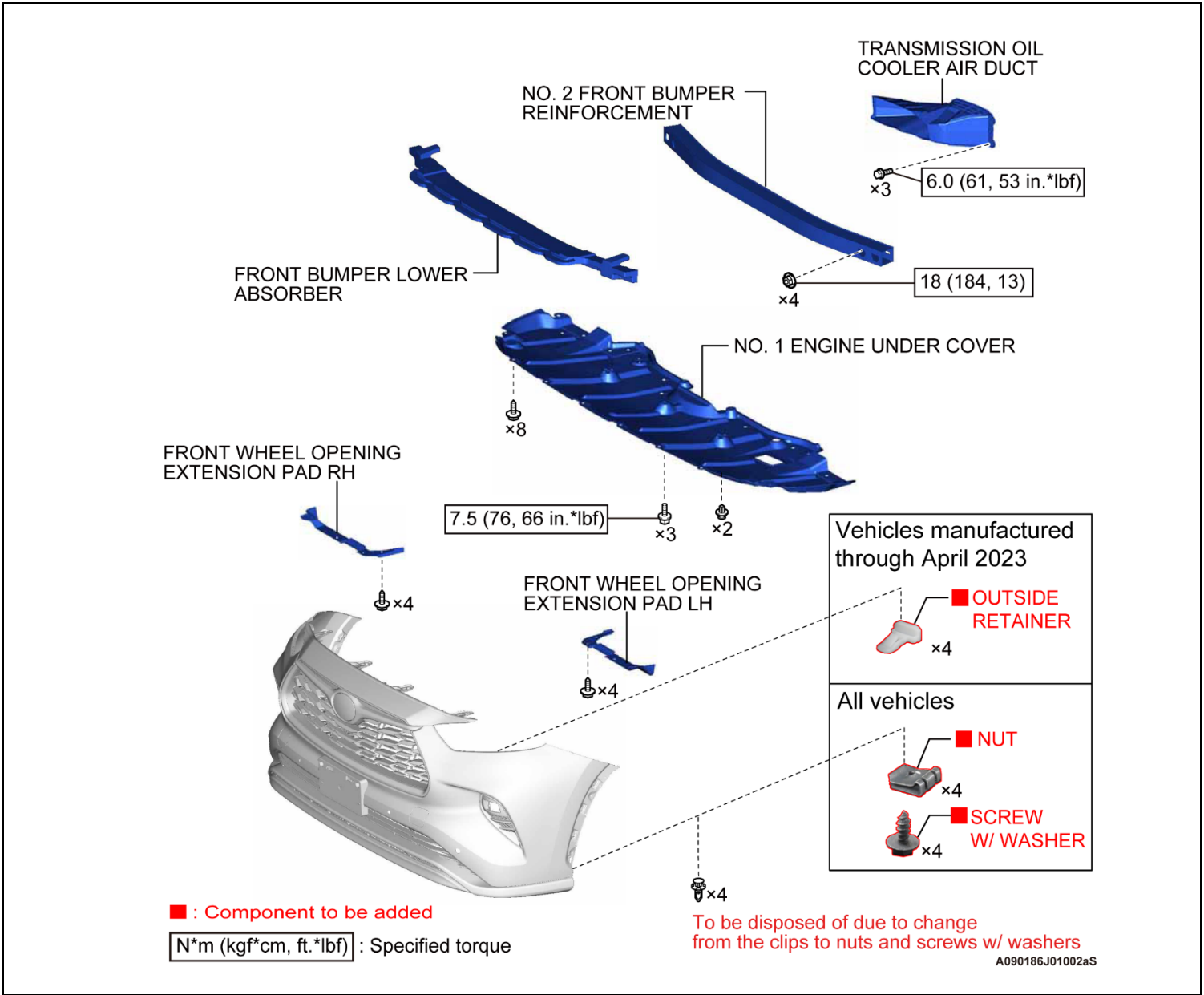
Add fasteners to the front bumper cover



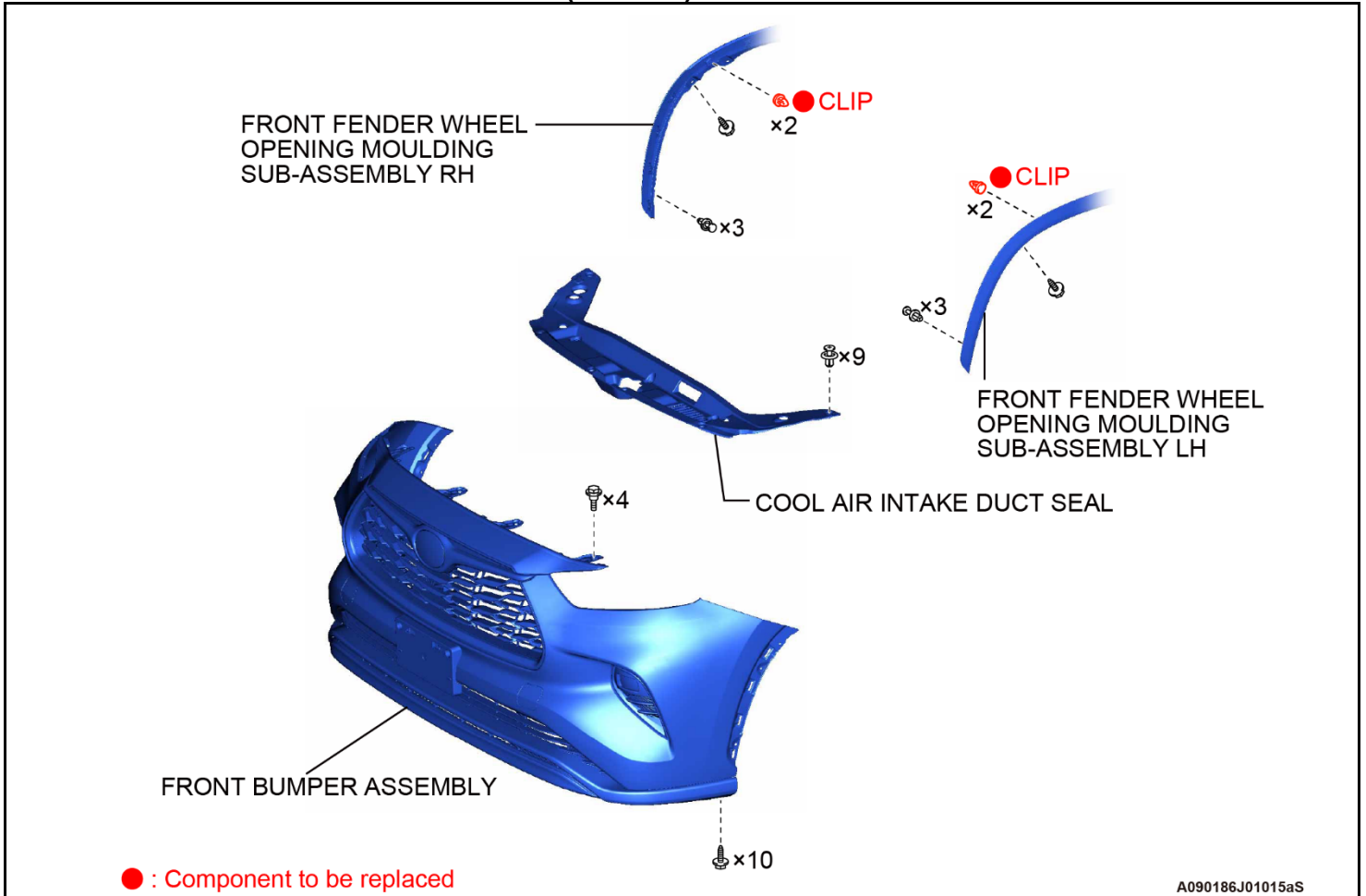
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V. COMPONENTS

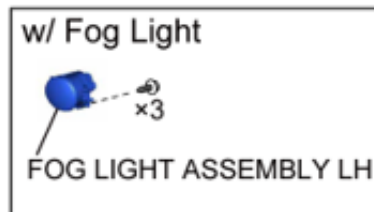
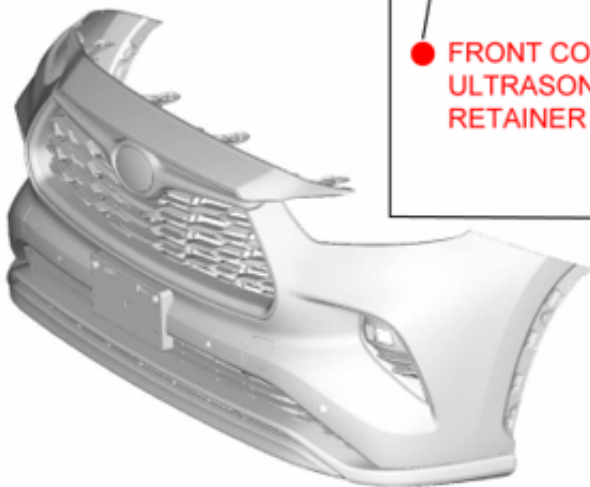
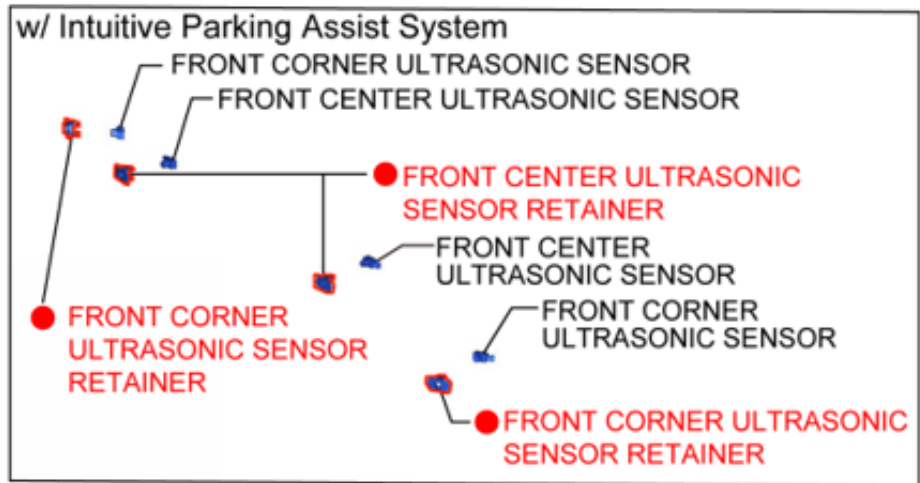
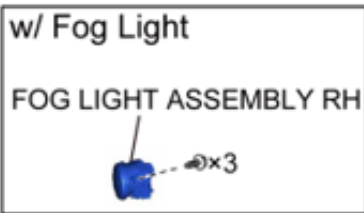
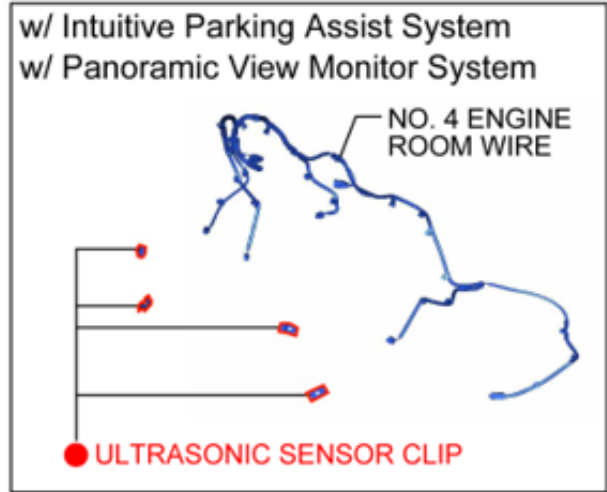
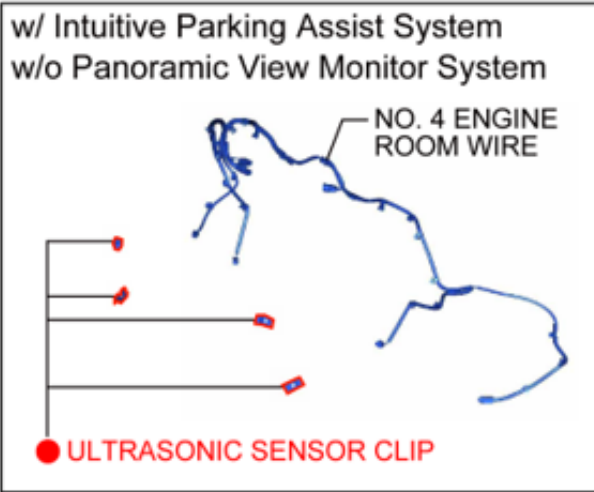
1. IF THE INSPECTION RESULT IS OK:



2. IF INSPECTION RESULT IS NG (PART A):



3. IF INSPECTION RESULT IS NG (PART B):

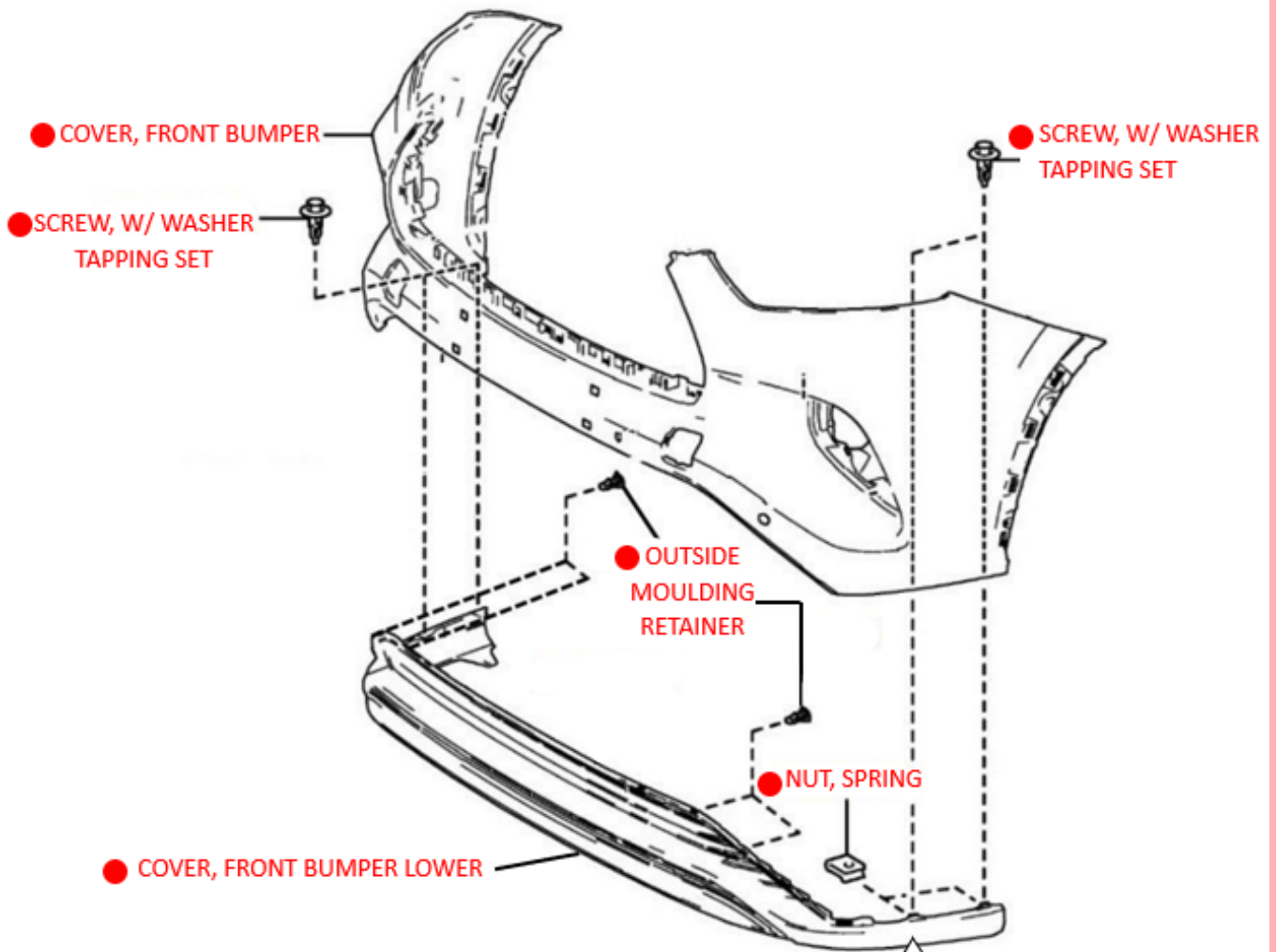


● : Component to be replaced

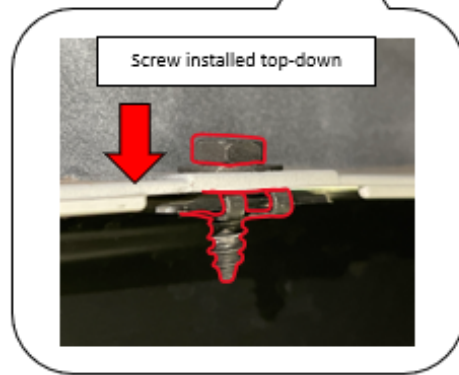
N*m (kgf*cm, ft.*lbf) : Specified torque

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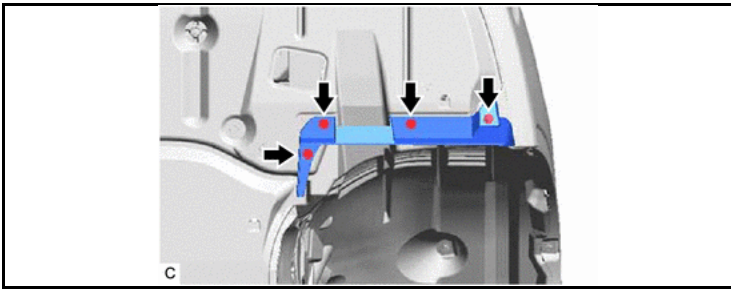
4. IF INSPECTION RESULT IS NG (PART C):



● : Component to be replaced

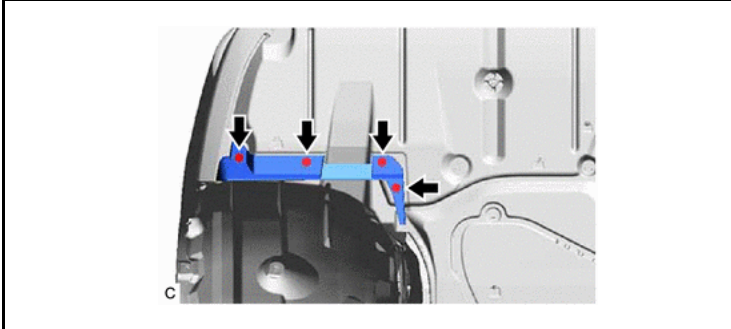


VI. INSPECTION PROCEDURE



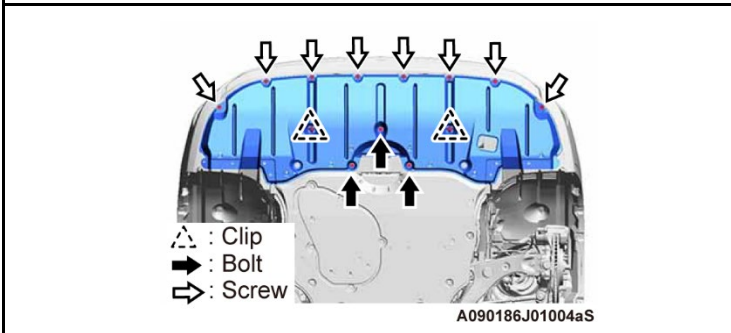
1. REMOVE THE FRONT WHEEL OPENING EXTENSION PAD LH

- a) Remove the 4 screws and front wheel opening extension pad LH.



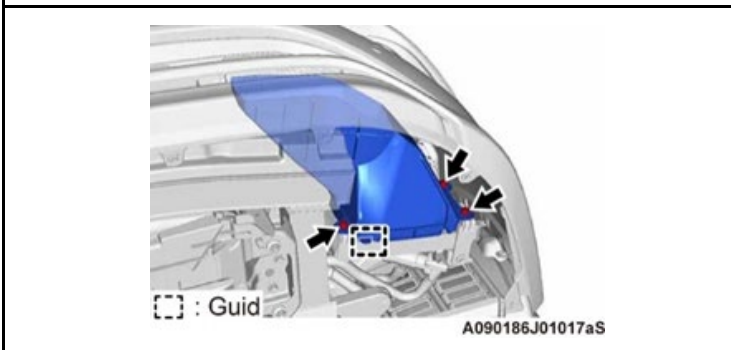
2. REMOVE THE FRONT WHEEL OPENING EXTENSION PAD RH

- a) Remove the 4 screws and front wheel opening extension pad RH.



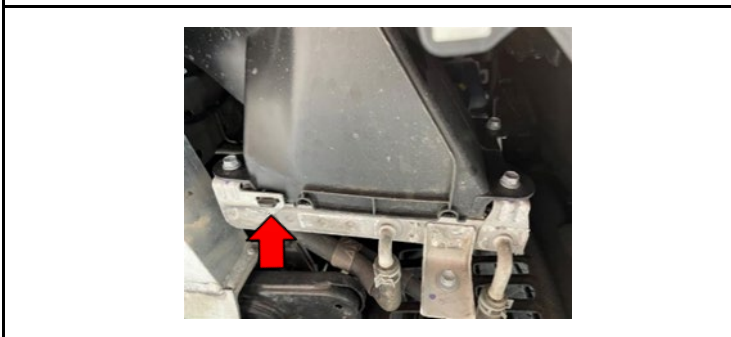
3. REMOVE NO. 1 ENGINE UNDER COVER

- a) Remove the 3 bolts, 8 screws, 2 clips and No. 1 engine under cover.

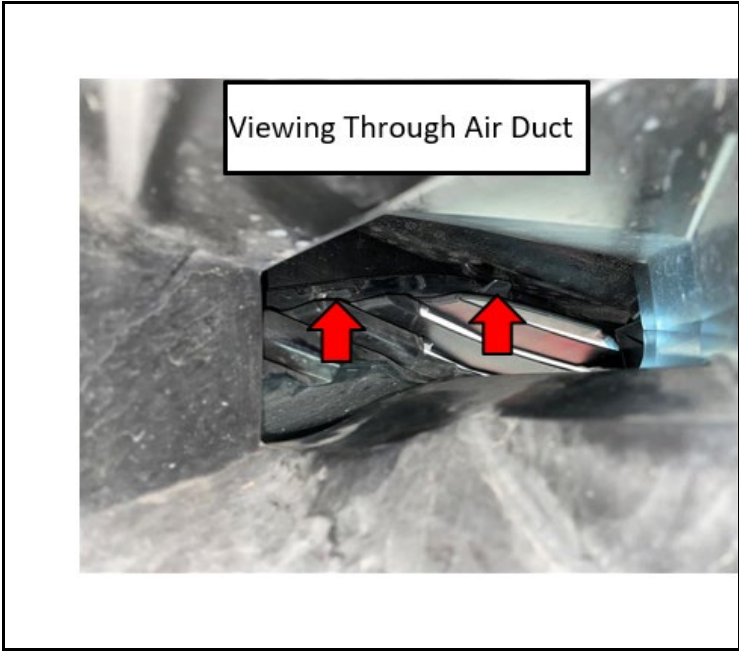


4. UNBOLT THE TRANSMISSION OIL COOLER AIR DUCT (IF APPLICABLE)

- a) Remove the 3 bolts from the transmission oil cooler duct located on the driver's side front bumper.



- b) Disengage the guide to remove the transmission oil cooler air duct from the oil cooler assembly.



- c) Turn the air duct so that the upper driver's side bumper cover claws can be viewed by peering through the tube with a flashlight.

5. INSPECT FRONT BUMPER COVER CLAWS

a) Check for damage on the 4 claws (shown in the picture) and check that all the claws are engaged.

NOTICE:

If the painted upper front bumper cover is damaged from obvious collision, please advise the owner to repair their collision damage, and then the remedy can be performed.

HINT:

If the claws cannot be easily seen, use a mirror.

b) If disengaged claws were found in step “a”, properly engage them.

Result	○ : Short	○ : Long
OK		
NG		

Inspection Result	Damaged Claws	Action					Go to
		Install NEW nuts and NEW screws w/ washers	[Vehicles manufactured through April 2023] Install NEW outside retainers.	[Vehicles manufactured from May 2023] Install NEW outside retainers.	Replace the front bumper lower cover with a NEW one*	Replace the front bumper cover and front bumper lower cover with a NEW one*	
OK	Not Found	●	●	-	-	-	GO TO SECTION VII
NG	Found	●	●	●	●	●	GO TO SECTION X

***NOTICE:**

If the upper front bumper cover is damaged from obvious collision damage, please advise the owner to repair their collision damage, then the remedy can be performed.

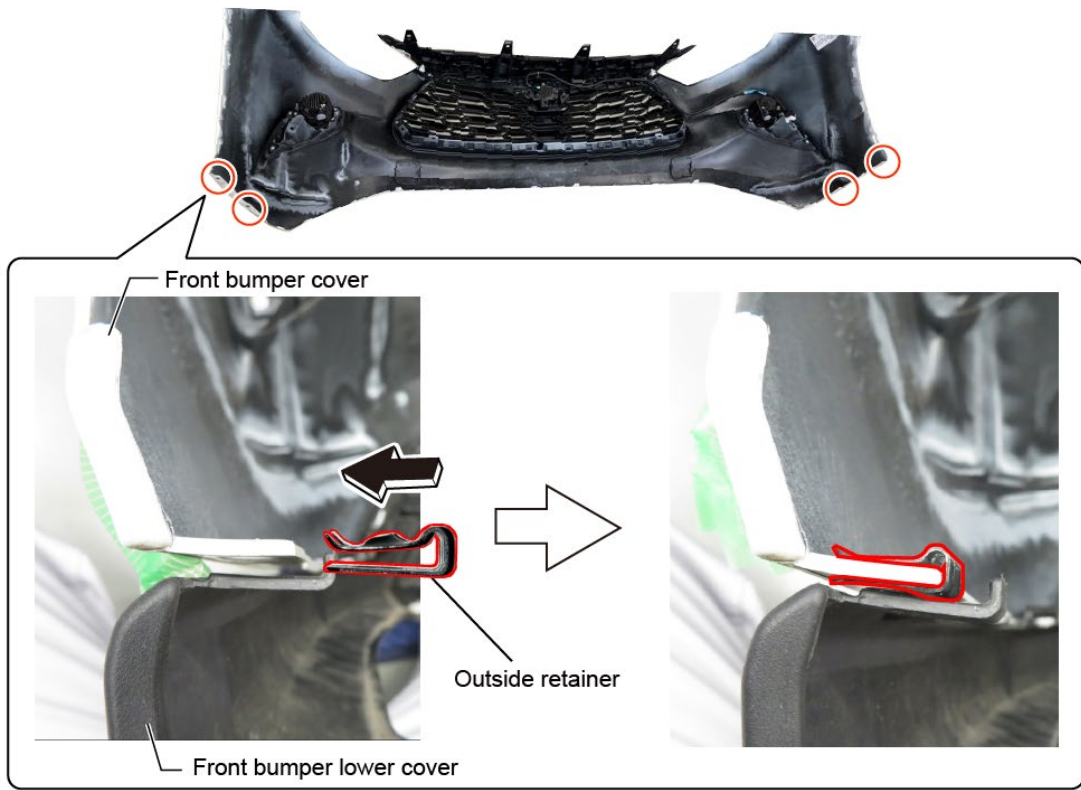
VII. ADD FASTENERS TO THE FRONT BUMPER COVER (IF INSPECTION RESULT IS OK)

1. INSTALL NEW NUTS AND NEW SCREWS AND WASHERS

- a) Remove the 4 clips.

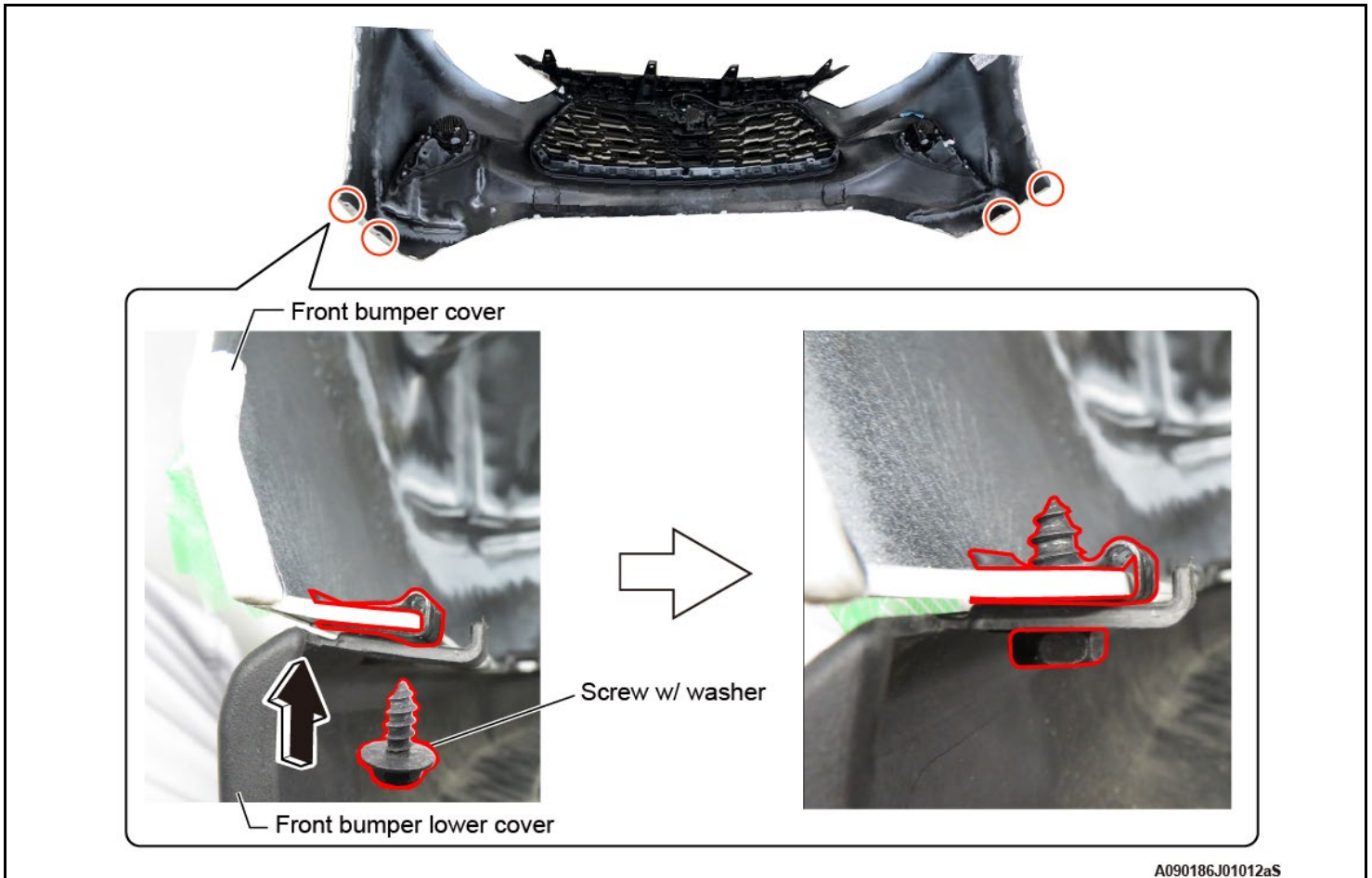


- b) Mark or destroy the removed 4 clips and store them in a separate container to prevent accidental reuse.
- c) Install the 4 **NEW** nuts.



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- d) Install the 4 **NEW** screws and washers.
- e) Confirm the alignment of the bumper and fender when fastening.



- f) Continue the procedure based on the vehicle's production date.

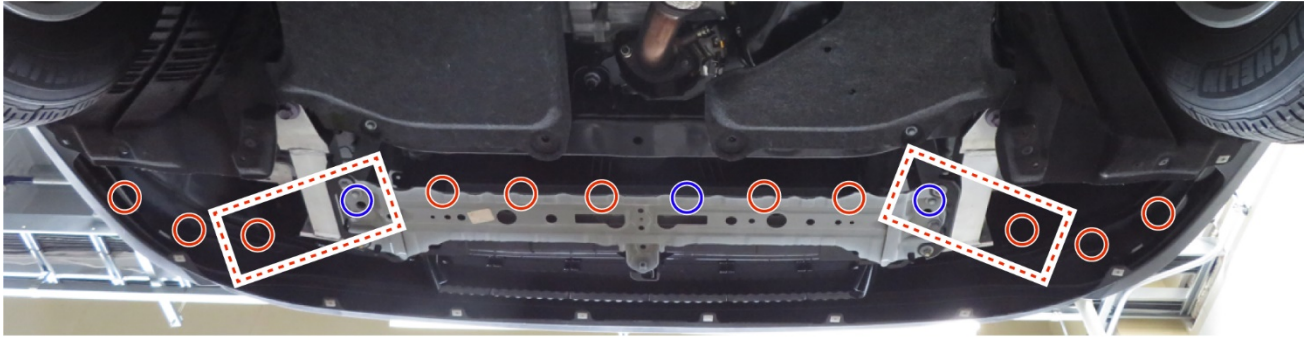
VEHICLE PRODUCTION PERIOD	
Through April 2023	From May 2023
Proceed to Section VIII .	Proceed to Section IX .

VIII. INSTALL OUTSIDE RETAINERS TO THE FRONT BUMPER COVER (IF INSPECTION RESULT IS **OK AND MANUFACTURED THROUGH APRIL 2023)**

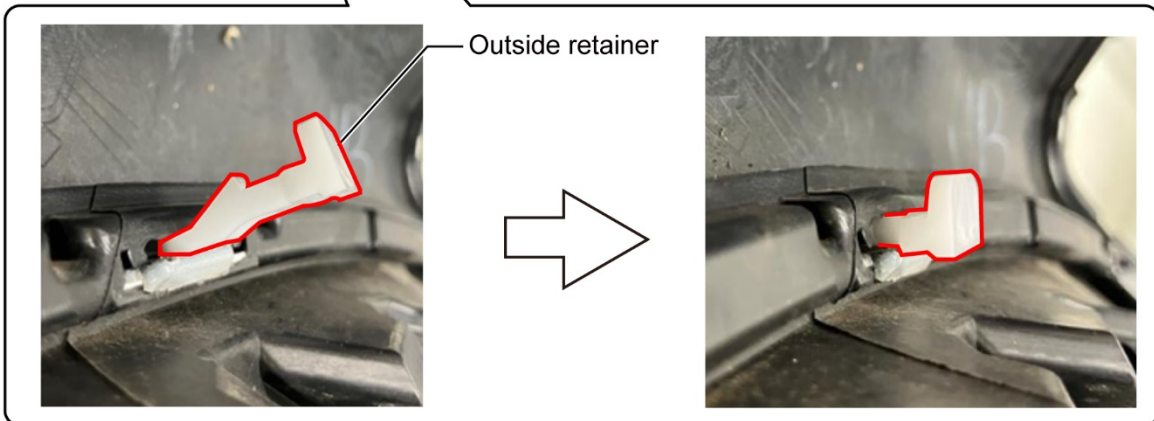
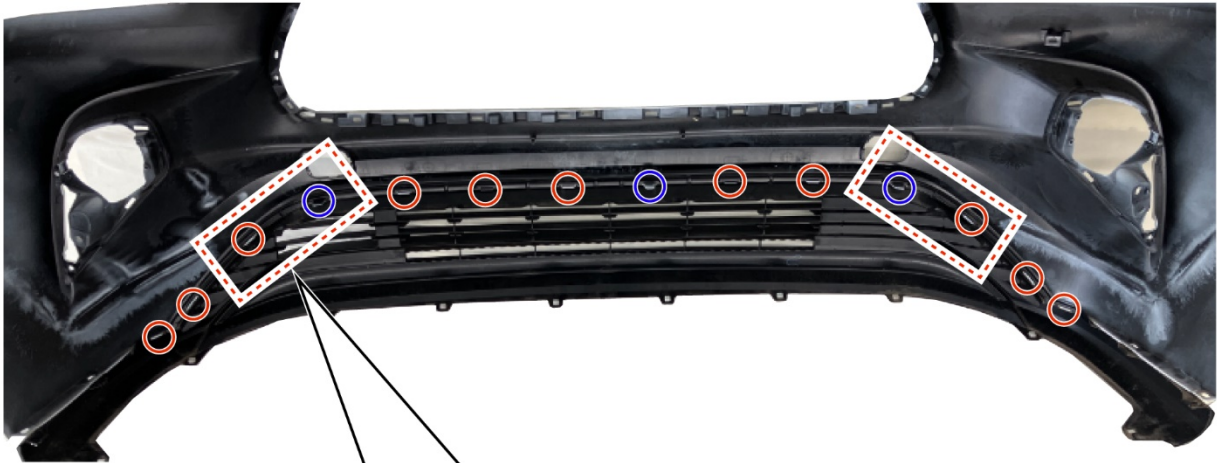
1. INSTALL NEW OUTSIDE RETAINERS

- a) Install the 4 **NEW** outside retainers to the locations shown in the picture.

NOTE: Some vehicles manufactured through April 2023 may already have new outside retainers installed from the plant. If new outside retainers are already present, proceed to Section IX.

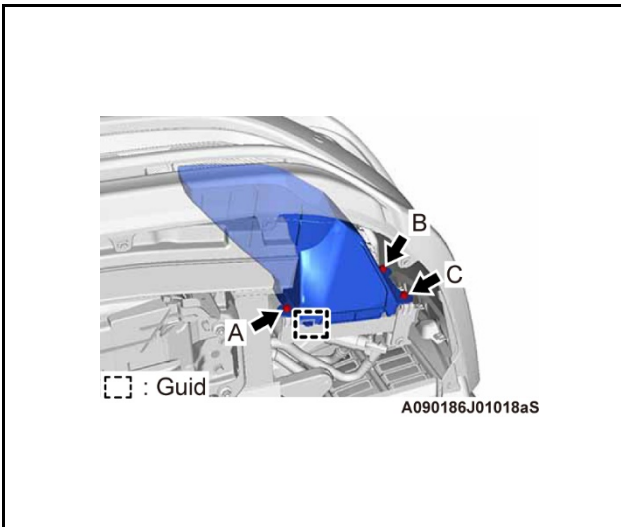


Install the 4 **NEW** outside retainers to the front bumper cover



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IX. RETURN VEHICLE TO ORIGINAL STATE (IF INSPECTION RESULT IS OK)



1. REINSTALL TRANSMISSION OIL COOLER AIR DUCT

- Re-engage the guide to temporarily reinstall the transmission oil cooler air duct to the oil cooler assembly.
- Reinstall the transmission oil cooler air duct to the oil cooler assembly with the 3 bolts.

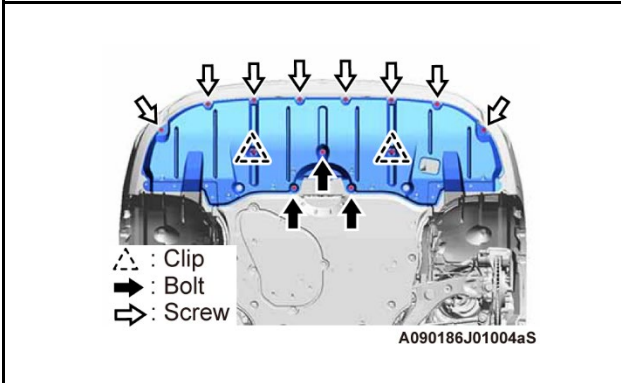
Torque:

6.0 N*m (61 kgf*cm, 53 in.*lbf)

HINT:

Tightening order: Bolt (A) → Bolt (B) → Bolt (C)

- Remove the protective tape.

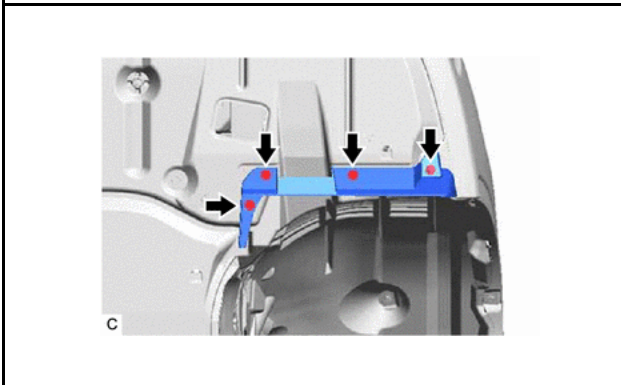


2. REINSTALL NO. 1 ENGINE UNDER COVER

- Reinstall the No. 1 engine under cover with the 3 bolts, 8 screws and 2 clips.

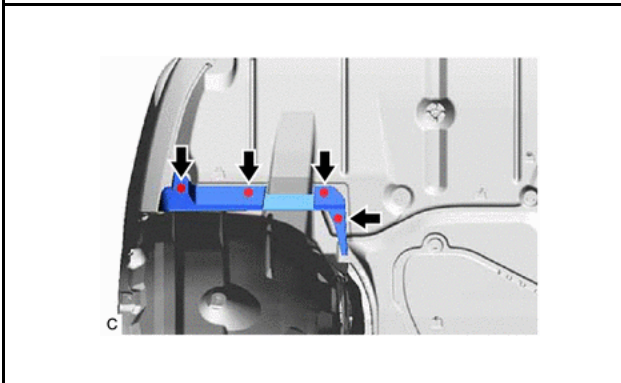
Torque:

Bolt: 7.5 N*m (76 kgf*cm, 66 in.*lbf)



3. REINSTALL FRONT WHEEL OPENING EXTENSION PAD LH

- Reinstall the front wheel opening extension pad LH with the 4 screws.



4. REINSTALL FRONT WHEEL OPENING EXTENSION PAD RH

- Reinstall the front wheel opening extension pad RH with the 4 screws.



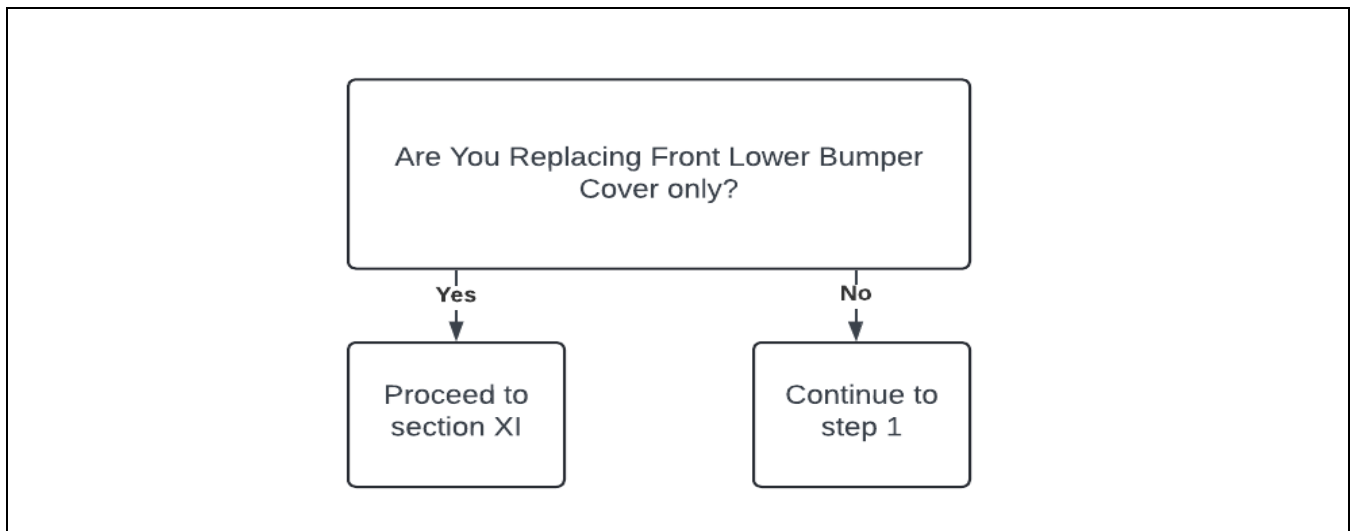
5. CHECK FOR DTCs

- a) Using Techstream, check for Diagnostic Trouble Codes.

NOTE: This Safety Recall covers only the installation of the front bumper repair kits and associated parts. It does not cover the diagnosis or replacement of any other parts of the vehicle.

6. Proceed to [Section XI](#).

X. REPLACE THE FRONT BUMPER COVER AND FRONT BUMPER LOWER COVER WITH A NEW ONE (IF INSPECTION RESULT IS NG)



1. CHECK FOR DTCs

NOTICE:

This campaign covers only the replacement of the front bumper cover and associated parts. It does not cover the vehicle's diagnosis or replacement of any other parts.

2. REMOVE THE FRONT BUMPER ASSEMBLY

[EXTERIOR PANELS / TRIM: FRONT BUMPER \(except Sport Package\): REMOVAL; 2021 - 2023 MY Highlander](#)

- a) For the removed 4 clips (for fastening the front fender wheel opening molding sub-assembly), mark or destroy, and then store them in a separate container so as to not reuse them in error.

3. DISASSEMBLE THE FRONT BUMPER COVER

[EXTERIOR PANELS / TRIM: FRONT BUMPER \(except Sport Package\): DISASSEMBLY; 2020 - 2024 MY Highlander](#)

- a) For the removed components listed below, mark or destroy them, and then store them in a separate container so as to not reinstall them in error.
- Front bumper cover
 - Ultrasonic Sensor Clip
 - Front center ultrasonic sensor retainer
 - Front corner ultrasonic sensor retainer

4. ASSEMBLE THE **NEW** FRONT BUMPER COVER

[EXTERIOR PANELS / TRIM: FRONT BUMPER \(except Sport Package\): REASSEMBLY; 2020 - 2024 MY Highlander](#)

5. REINSTALL THE FRONT BUMPER ASSEMBLY

[EXTERIOR PANELS / TRIM: FRONT BUMPER \(except Sport Package\): INSTALLATION; 2021 - 2024 MY Highlander](#)

XI. REPLACE THE FRONT BUMPER LOWER COVER WITH A **NEW** ONE (IF INSPECTION RESULT IS **NG**)

1. CHECK FOR DTCs

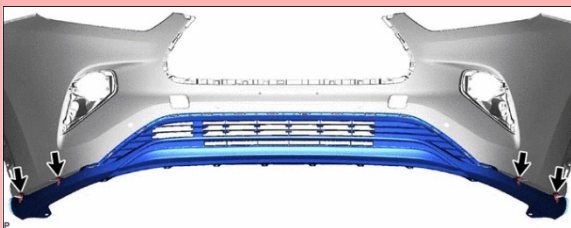
NOTICE:

This campaign covers only the replacement of the front bumper cover and associated parts. It does not cover the vehicle's diagnosis or replacement of any other parts.

2. REMOVE THE FRONT BUMPER ASSEMBLY

[EXTERIOR PANELS / TRIM: FRONT BUMPER \(except Sport Package\): REMOVAL; 2021 - 2023 MY Highlander](#)

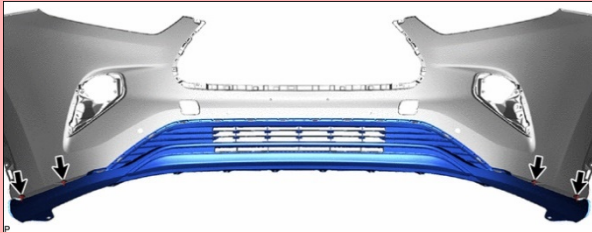
- a) For the removed 4 clips (for fastening the front fender wheel opening molding sub-assembly), mark or destroy, and then store them in a separate container so as to not reuse them in error.



(A)

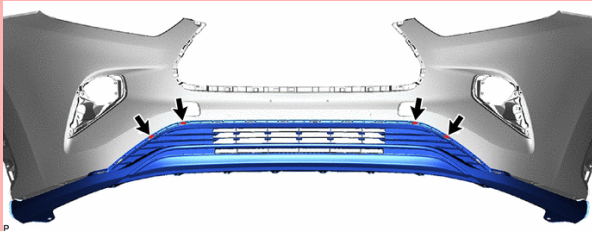
3. REMOVE FRONT BUMPER LOWER COVER

- a) for **Type A**: Remove the 4 clips.

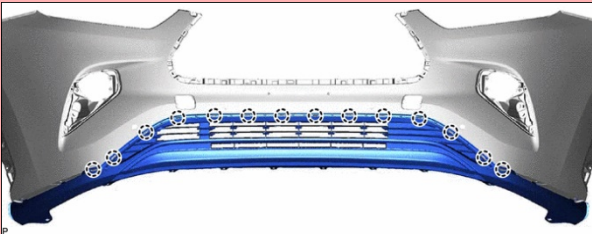


(B)

b) for **Type B**: Remove the 4 screws.



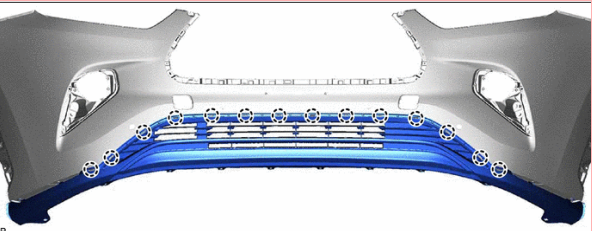
4. REMOVE THE 4 CLIPS



5. DISENGAGE THE CLAWS

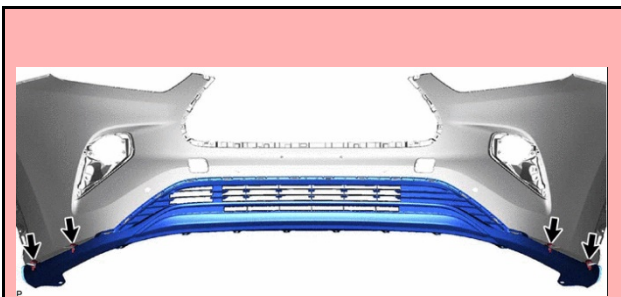
a) Disengage 14 claws to remove the front bumper lower cover from the front bumper cover.

XII. REINSTALL THE FRONT BUMPER LOWER COVER (IF INSPECTION RESULT IS **NG**)

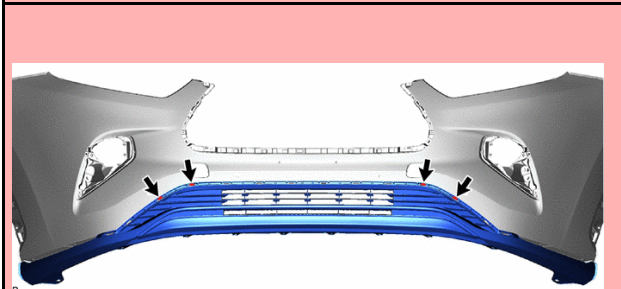


1. INSTALL FRONT BUMPER LOWER COVER

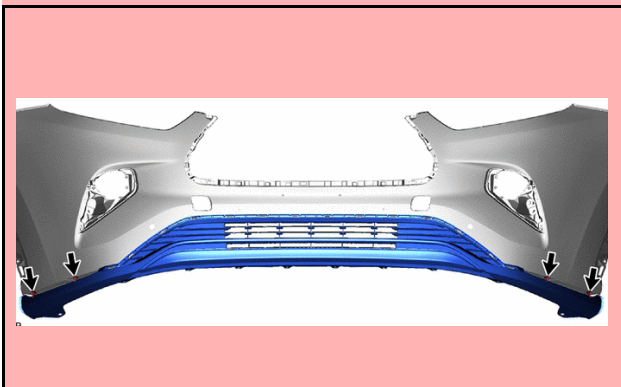
a) Engage the 14 claws.



(A)



(B)



2. INSTALL FRONT BUMPER LOWER COVER

- a) **For Type A:** Install the front bumper lower cover to the front bumper cover with the 4 clips.
- b) **For Type B:** Install the 4 clips.

3. INSTALL THE 4 SCREWS

4. REINSTALL THE FRONT BUMPER ASSEMBLY

[EXTERIOR PANELS / TRIM: FRONT BUMPER \(except Sport Package\): INSTALLATION; 2021 - 2024 MY Highlander](#)

◀ VERIFY REPAIR QUALITY ▶

- Confirm that bumper claws are properly installed.
- Confirm that all panels are properly installed.
- Confirm that the new bumper is properly installed (if required).
- Confirm all sensors and calibrations are completed (if required).
- Confirm no DTCs exist.

Please contact your regional area representative if you have any questions regarding this update.

XIII. APPENDIX

A. PARTS DISPOSAL

In accordance with Federal law, please make sure all recalled parts (original parts) removed from the vehicle are disposed of in a manner in which they will not be reused, ***unless requested for parts recovery return.***

B. CAMPAIGN DESIGNATION DECODER

