

Preparation

**Part Numbers:**

**PT989-3524B (With Sonar)**

**PT989-3524E (Without Sonar)**

**Kit Contents**

Item #	Quantity Reqd.	Service Part #	Description
1	1	PT989-35240-AD (with Sonar) PT989-35240-AJ (without Sonar) PT989-35240-AR (Valence) PT989-35240-AF (Rr Lamp Cover)	Bumper ASSY
2	1	PT82Y-35240-AB	RH BSM Housing
3	1	PT82Y-35240-AA	LH BSM Housing
4	1	PT353-35240-AD	RH Radome
5	1	PT353-35240-AC	LH Radome
6	1	PT989-35240-AK	RH L-Bracket
7	1	PT989-35240-AL	LH L-Bracket
8	1	PT989-35240-AP	RH Peninsula Bracket
9	1	PT989-35240-AM	LH Peninsula Bracket
10	1	PT989-35240-AN	Center Resin Panel
11	1	PT989-35240-AQ	LPL Bezel
12	1	52181-AK010	RH Bumper Mount Arm
13	1	52182-AK010	LH Bumper Mount Arm
14	1	PT989-35240-AC	Center Step Pad
15	1	PT989-35240-AB	RH Step Pad
16	1	PT989-35240-AA	LH Step Pad
17	1	N/A	Hardware Bag
18*	4	89341-35020	Parking Sonar
19*	2	89348-35040	Center Sonar Retainer
20*	2	89348-35050	Corner Sonar Retainer
21*	4	89348-35060	Sonar Clip
22*	1	N/A	BLE Antenna Double-Sided Tape

\*indicates an item included only with PT989-3524B

**Hardware Bag Contents**

Item #	Quantity Reqd.	Service Part #	Description
1	5	90467-07215	Clip
2	8	90119-A0318	M8 Bolt
3	2	90105-A0262	M6 Bolt

**Additional Items Required For Installation**

Item #	Quantity Reqd.	Description
1	1	82183-AK__ (Rear Bumper Wire Harness)

**Wire Harness must be ordered separately prior to installation (see page 3 for confirming part number)**

**Conflicts**

Vehicles without Blind Spot Monitor (SR without SR Upgrade Package)
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**General Applicability**

Vehicles with Blind Spot Monitor
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**Recommended Sequence of Application**

Item #	Accessory
1	Rear Steel Bumper
2	Rear Recovery Hook
3	Bed Step

\*Mandatory








**Vehicle Service Parts** (may be required for reassembly)

Item #	Quantity Reqd.	Description
1	1	PT989-35240-AA (LH Step Pad)
2	1	PT989-35240-AB (RH Step Pad)
3	1	PT989-35240-AC (Center Step Pad)

**Recommended Tools**

<b>Personal &amp; Vehicle Protection</b>	<b>Notes</b>
Portable light	For visibility underneath vehicle
<b>Special Tools</b>	<b>Notes</b>
Vehicle Protection	Blankets or Fender covers
SST 09870-60000	For Blind Spot Monitor adjustment process
SST 01815-00102 with attachment 09989-00020-01	For Intuitive Parking Assist sensor angle measurement
Heat light	
<b>Installation Tools</b>	<b>Notes</b>
Torque wrench	Square drive (0-75 Nm)
Sockets	10mm, 12mm (shallow and deep)
Wrench (box or open)	12mm
Ratchet	
Screwdriver	Flat head
Pick	
Needle nose pliers	
Trim removal tool	Plastic
Protective tape	
<b>Special Chemicals</b>	<b>Notes</b>
Cleaner	Approved cleaning formulation

**Legend**

	<b>STOP:</b> Damage to the vehicle may occur. Do not proceed until process has been complied with.
	<b>OPERATOR SAFETY:</b> Use caution to avoid risk of injury.
	<b>CAUTION:</b> A process that must be carefully observed in order to reduce the risk of damage to the accessory/vehicle and to ensure a quality installation.
	<b>TOOLS &amp; EQUIPMENT:</b> Used in Figures calls out the specific tools and equipment recommended for this process.
	<b>REVISION MARK:</b> This mark highlights a change in installation with respect to previous issue.
	<b>SAFETY TORQUE:</b> This mark indicates that torque is related to safety.
	<b>REGULATORY MARK:</b> This mark indicates the component is related to regulatory compliance

2024+ Toyota Tacoma DIO Rear Steel Bumper Order Chart

Blind Spot Monitor	Parking Sonar	Smart Key Antenna	Digital Key Antenna	Bumper Kit	Wire Harness	Description
				Part Number	Part Number	
With	Without	Without	Without	PT989-3524E	82183-AK090	w/ Blind Spot Monitor
With	With	Without	Without	PT989-3524B	82183-AK190	w/ Blind Spot Monitor and Parking Sonar
With	Without	With	Without	PT989-3524E	82183-AK080	w/ Blind Spot Monitor and Smart Key Antenna
With	With	With	Without	PT989-3524B	82183-AK180	w/ Blind Spot Monitor, Parking Sonar, and Smart Key Antenna
With	With	With	With	PT989-3524B	82183-AK030	w/ Blind Spot Monitor, Parking Sonar, Smart Key Antenna, and Digital Key Antenna

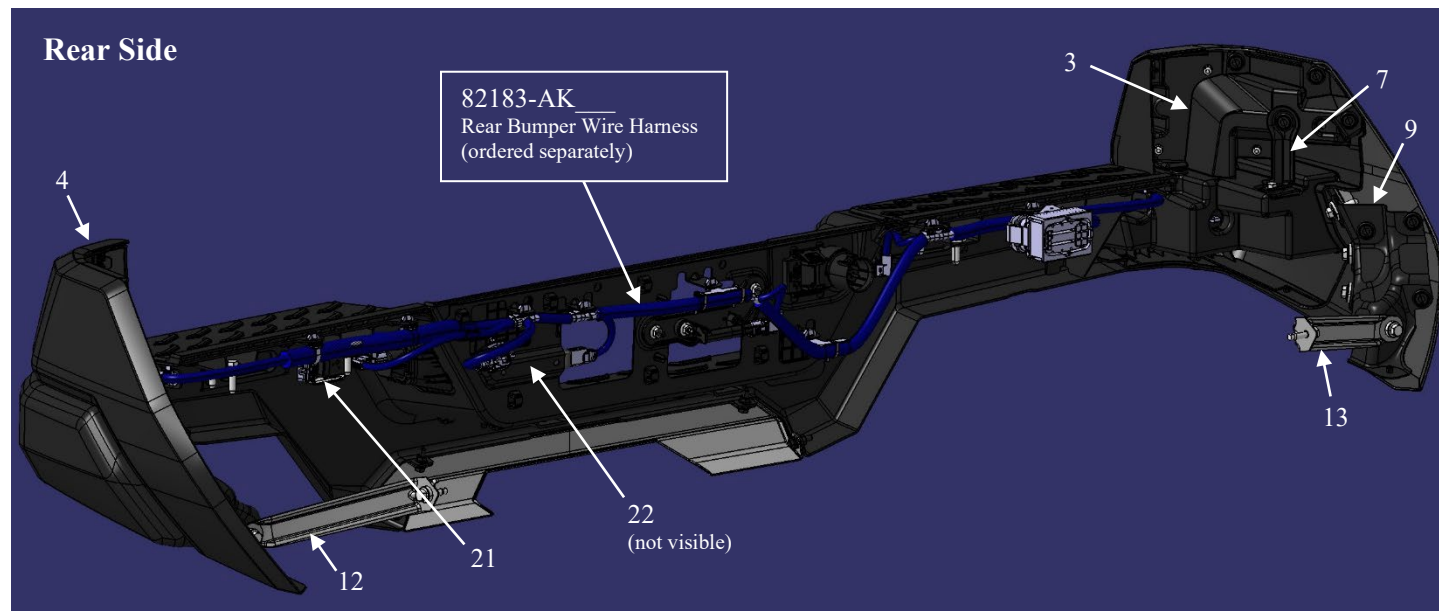
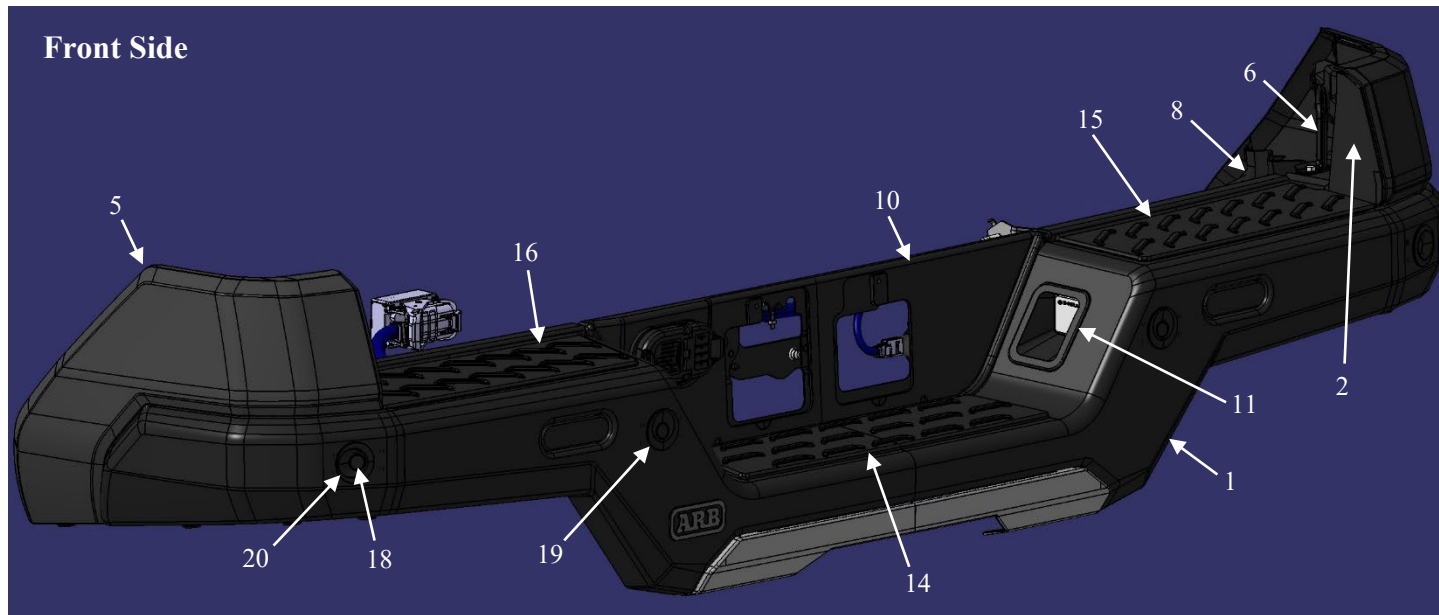
**Equipment Confirmation**

- Blind Spot Monitor** - Confirm if vehicle is equipped with Blind Spot Monitors by inspecting outside rearview mirrors or settings in the Multi Information Display (MID). Blind Spot Monitors **MUST** be equipped for DIO rear steel bumper installation.
- Parking Sonar** - Confirm if sensors are present on the Rear Center Bumper Pad (and Rear Bumper Extension Inserts not shown).
- Smart Key Antenna** - Confirm if an antenna bracket is present in left window of the Rear Center Bumper Pad. (Production part will be black in color)
- Digital Key Antenna** - Confirm if an antenna wire harness connector is present in right window of the Rear Center Bumper Pad.

To confirm items 3 and 4, the license plate must be removed.



Rear Bumper Images (see Kit Contents for additional detail)



Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

These guidelines can be found in the "Accessory Installation Practices" document.

This document covers such items as:

- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.).
- Safety (eye protection, rechecking torque procedure, etc.).
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.).
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.).

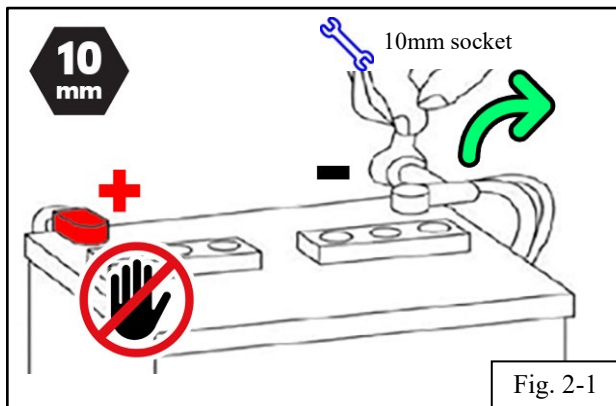
Please see your Toyota dealer for a copy of this document.

Please note that most of these instructions are taken from the following sections in the vehicle repair manual:

Vehicle Exterior >> EXTERIOR PANELS/ TRIM  
>> REAR BUMPER

Audio / Visual / Telematics >> PARK ASSIST /  
MONITORING >> BLIND SPOT MONITOR  
SENSOR

Audio / Visual / Telematics >> PARK ASSIST /  
MONITORING >> PARKING SUPPORT BRAKE  
SYSTEM



## 1. Parts and Vehicle Preparation

- ⚠ (a) Confirm part numbers on-hand match existing vehicle equipment based on the table from page 3 prior to beginning installation.
- (b) Check kit for contents and damage.
- (c) Apply vehicle protection to tailgate and rear quarter panels.

## 2. Resin Bumper Removal

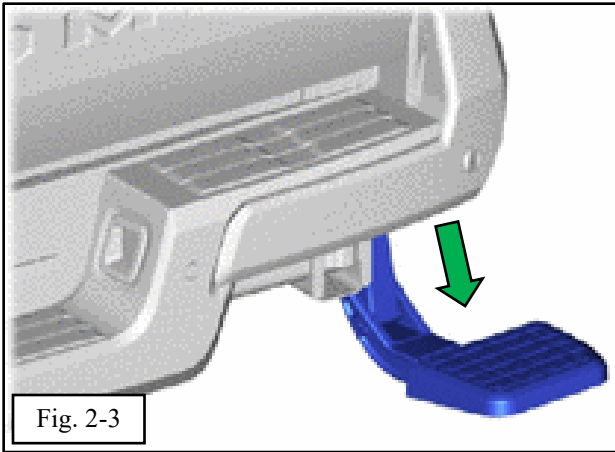
- (a) Disconnect negative terminal on 12V battery using a 10mm socket (Fig. 2-1).

⚠ **NOTE:** Keep negative cable away from the battery terminal to avoid accidentally reconnecting the 12V power if the cable falls back to its natural shape.

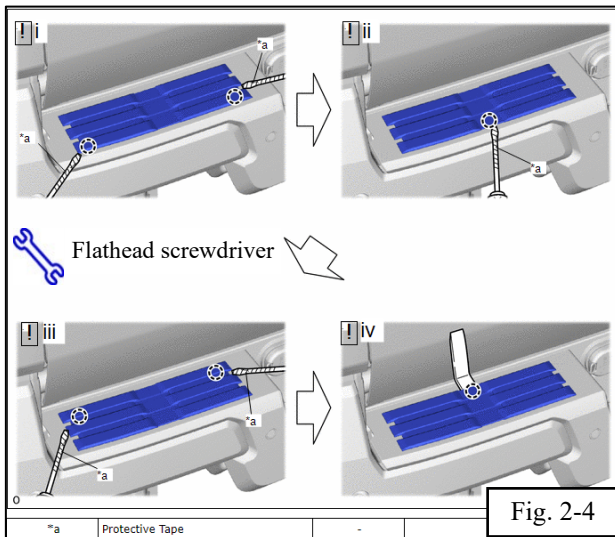
For gas vehicles, the battery is located in the engine compartment.

⚠ For hybrid vehicles, the battery is underneath the rear seat. To access, remove the 3 clips and lift up the seat bottom (Fig. 2-2). **DO NOT** discard these clips, they will be re-installed in a later step.

**HINT:** Latch the seat belt to hold the seat bottom in the lifted position.



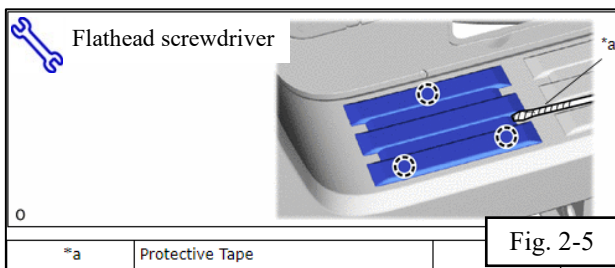
(b) If equipped, deploy the Bed Step (Fig 2-3).



(c) Remove the outer step pads using a flathead screwdriver covered with protective tape (Fig. 2-4).

**NOTE: Discard these parts, they will not be re-used.**

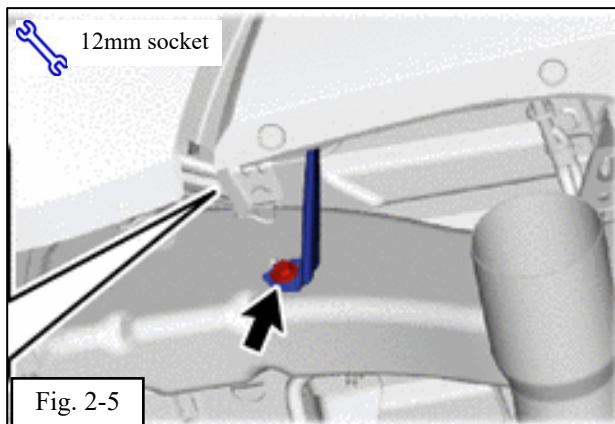
**LH shown, repeat for RH side**



(d) Remove the inner step pads using a flathead screwdriver covered with protective tape (Fig. 2-5).

**NOTE: Discard these parts, they will not be re-used.**

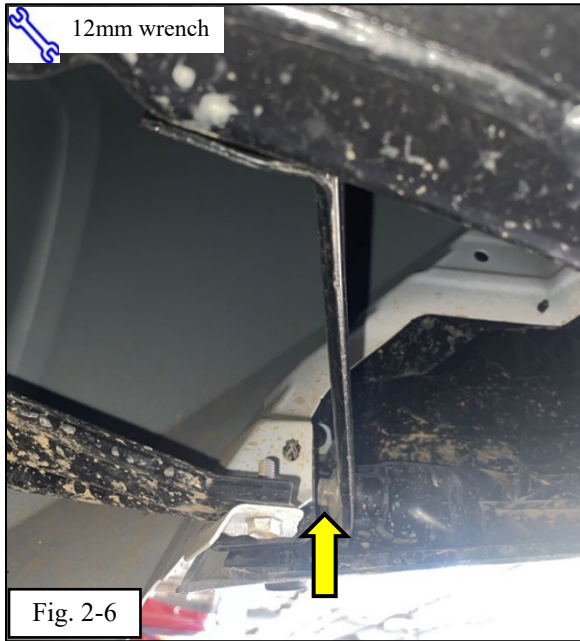
**LH shown, repeat for RH side.**



(e) Remove the bolt attaching the OE Bumper Mount Arms to the frame using a 12mm socket (Fig. 2-6).

**⚠ NOTE: DO NOT discard, these fasteners will be re-used at a later step.**

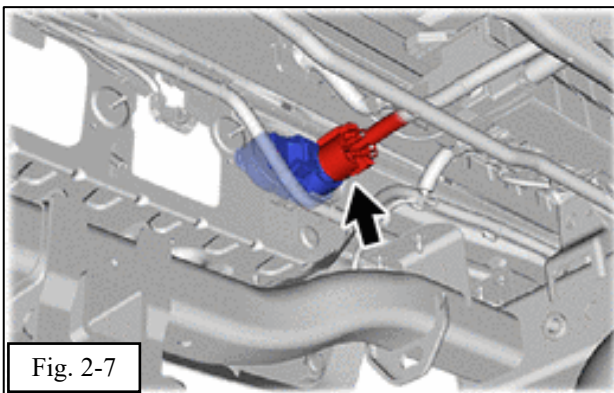
**LH shown, repeat for RH side.**



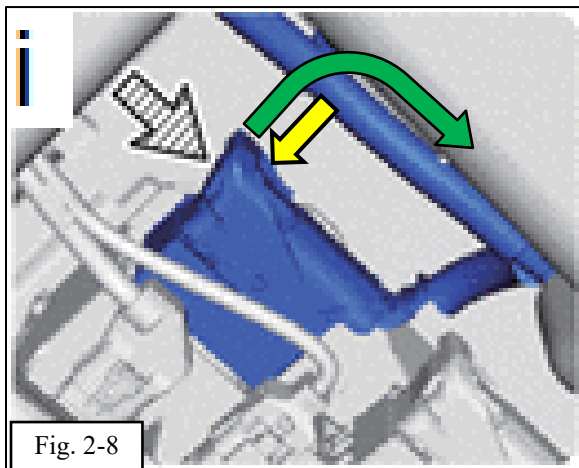
- (f) Loosen the bolt attaching the OE Bumper Mount Arms to the bumper using a 12mm wrench (Fig. 2-6).

**NOTE: The bolt cannot be completely removed due to clearance, so loosen until the Bumper Arm can freely rotate.**

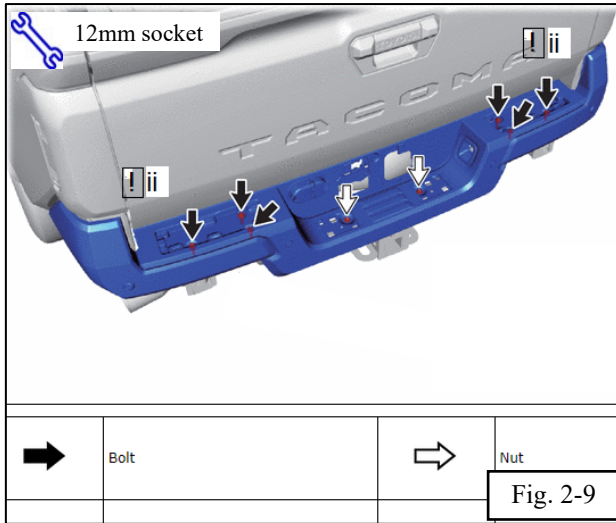
**LH shown, repeat for RH side.**



- (g) Disconnect the wire harness for the Towing Wire Harness Connector by squeezing the tabs to release (Fig. 2-7).



- (h) Disconnect the Rear Bumper Wire Harness (Fig. 2-8). Press the tab as shown by the yellow arrow and swing the arm to release the lock (green arrow).



- (i) Remove 2 nuts and 6 bolts attaching the bumper to the frame using a 12mm socket (Fig. 2-9).

**NOTE:** DO NOT discard, these fasteners will be re-used at a later step.

- (j) Remove the Bumper from the vehicle. Set the bumper on a clean table or workbench for disassembly in the next section.

**NOTE:** Carefully remove the bumper to ensure parts do not rub together causing damage to painted surfaces or the lens of the rear combination lamps

**NOTE:** Use caution to ensure the Rear Bumper Wire Harness does not get snagged during removal.

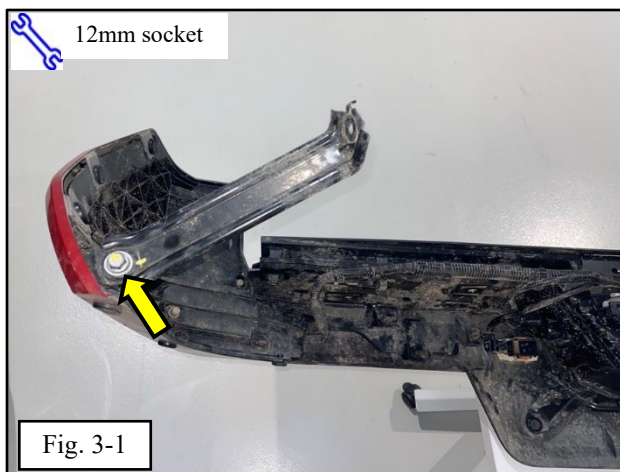
### 3. Resin Bumper Disassembly

- (a) Remove the OE Bumper Mount Arms from the bumper using a 12mm socket (Fig. 3-1).

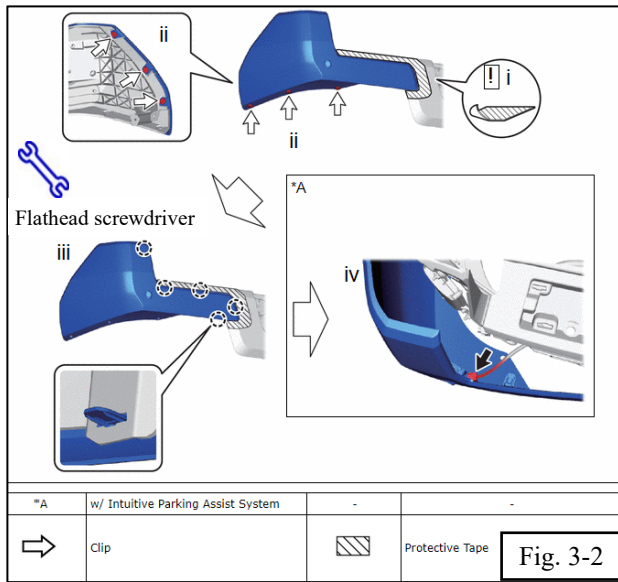
**NOTE:** DO NOT discard the fasteners, these will be re-used at a later step.

The OE Bumper Mount Arms will not be re-used.

RH shown, repeat for LH side.





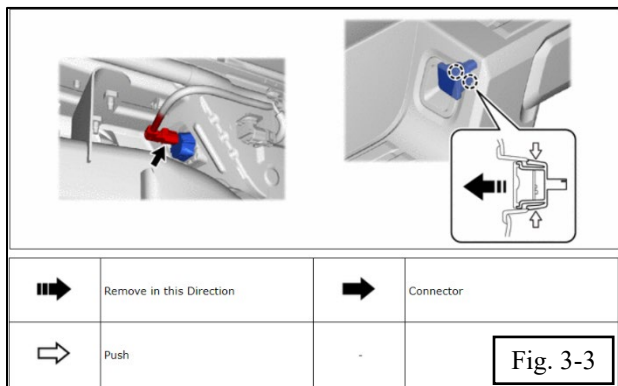


(b) Remove the OE Radomes from the OE rear bumper assembly (Fig. 3-2).  
Apply protector tape along the area where the OE Radome meets the OE Center Resin Panel.  
Start by removing 6 clips using a flathead screwdriver (white arrows in Fig. 3-2). Then disengage the claws and carefully separate the Radome from the OE rear bumper assembly.  
For vehicles with Intuitive Parking Assist (if PT989-3524B is being installed), disconnect the wire harness from the sensor (black arrow in Fig. 3-2).

**⚠ NOTE: DO NOT discard the clips, they will be re-used at a later step.**

**The OE Radomes (including sensors and retainers) will not be re-used.**

**LH shown, repeat for RH side.**



(c) Remove the License Plate Light from the OE rear bumper assembly (Fig. 3-3).  
Disconnect the wire harness connector (black arrow in Fig. 3-3).  
Squeeze the claws (white arrows in Fig. 3-3) and push the part inboard to remove.

**⚠ NOTE: DO NOT discard this part, it will be re-used at a later step.**

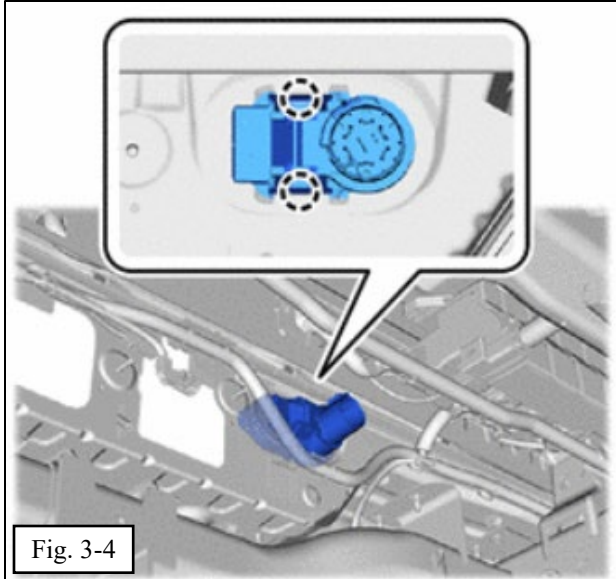


Fig. 3-4

(d) Remove the license plate from the OE rear bumper assembly.

**⚠ NOTE: DO NOT discard the license plate or the fasteners, they will both be re-used at a later step.**

**Determine the necessary tool based on the fasteners installed on the vehicle (varies vehicle to vehicle due to non-factory part).**

(e) Remove the Towing Wire Harness Connector from the OE Center Resin Panel. Squeeze the two claws to release the part (Fig. 3-4).

**⚠ NOTE: DO NOT discard this part, it will be re-used at a later step.**

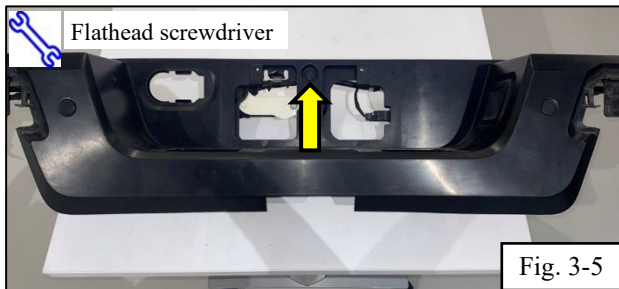


Fig. 3-5

(f) Remove the clip holding the OE Center Resin Panel to the OE rear bumper assembly on the rear side using a flathead screwdriver (Fig. 3-5).

**⚠ NOTE: DO NOT discard the clip, it will be re-used at a later step.**

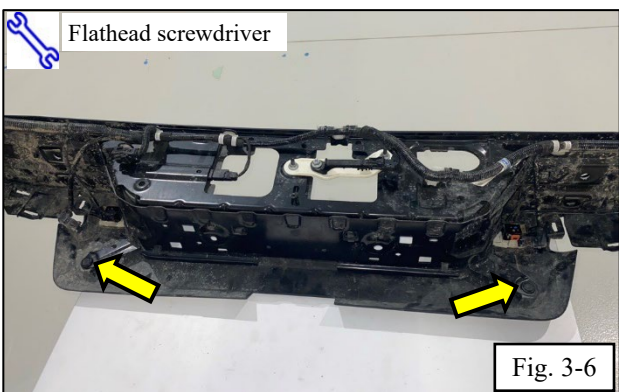
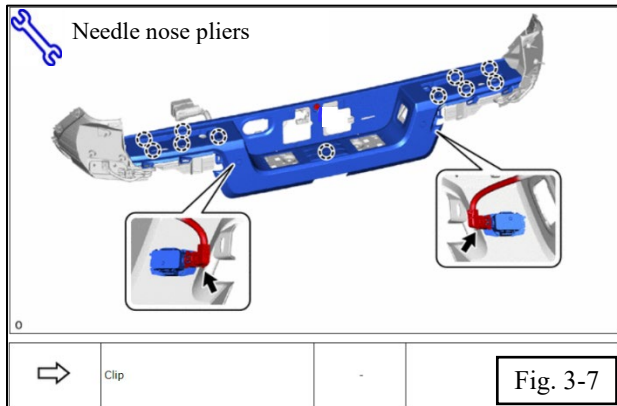


Fig. 3-6

(g) Remove the two clips holding the OE Center Resin Panel to the OE rear bumper assembly on the front side using a flathead screwdriver (Fig. 3-6).

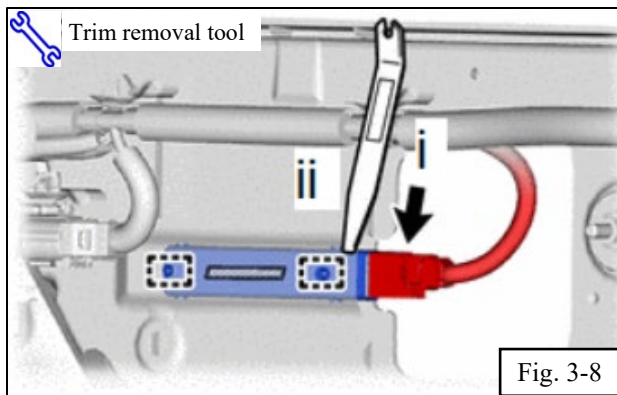
**⚠ NOTE: DO NOT discard the clips, they will be re-used at a later step.**



(h) Separate the OE Center Resin Panel from the OE rear bumper assembly by squeezing the claws with needle nose pliers and lifting the panel up (Fig. 3-7).

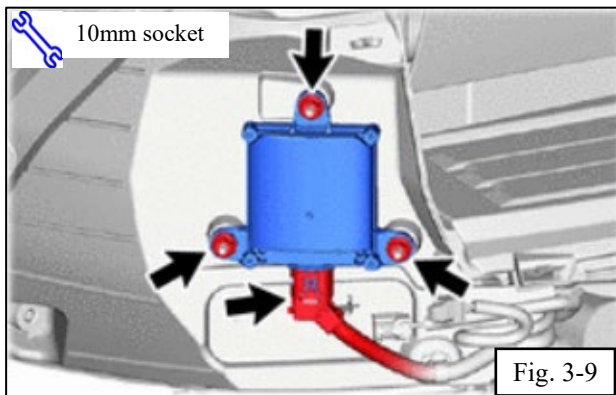
For vehicles with Intuitive Parking Assist (if PT989-3524B is being installed), disconnect the wire harness from the sensors (black arrow in Fig. 3-7).

**NOTE: The OE Center Resin Panel (including sensors and retainers) will not be re-used.**



(i) If equipped, disconnect the BLE Antenna from the wire harness, then remove from the OE bumper assembly using a trim removal tool to separate the double-sided tape (Fig. 3-8).

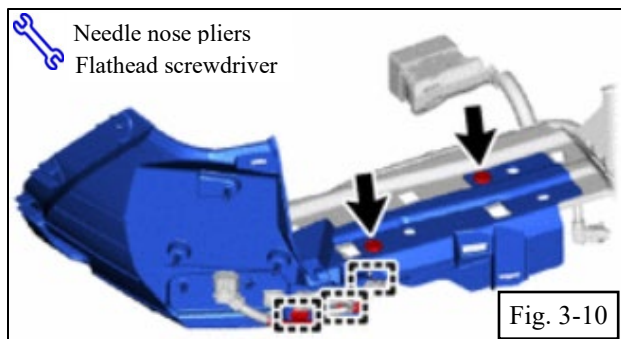
**⚠ NOTE: DO NOT discard the BLE Antenna, this will be re-used at a later step.**



(j) Disconnect the Blind Spot Monitor from the wire harness then remove using a 10mm socket (Fig. 3-9)

**⚠ NOTE: DO NOT discard the Blind Spot Monitors or the nuts, they will be re-used at a later step.**

LH shown, repeat for RH side.



(k) Remove the OE BSM Housings from the OE rear bumper assembly (Fig. 3-10).

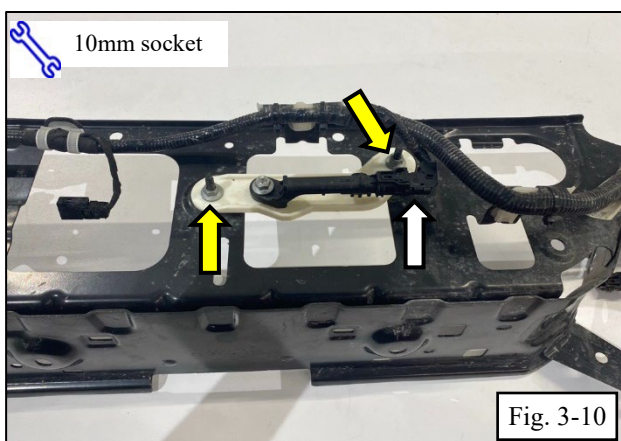
First detach the wire harness claws using needle nose pliers (boxed areas of Fig. 3-10). Then remove the 2 clips using a flathead screwdriver (black arrows on Fig. 3-10).



**NOTE: DO NOT discard the clips, they will be re-used at a later step.**

**The OE BSM Housings will not be re-used.**

**LH shown, repeat for RH side.**



(l) If equipped, remove the Smart Key Antenna and Bracket assembly from the OE rear bumper assembly.

First, disconnect the wire harness from the antenna (white arrow in Fig. 3-11).

Then remove the bracket from the bumper using a 10mm socket (two yellow arrows in Fig. 3-11).



**NOTE: DO NOT discard the fasteners or the antenna and bracket assembly, they will both be re-used at a later step.**

**24MY Tacoma, HV DIO Rear Steel Bumper Carryover Parts**

Item	Part Number	Quantity	Removal Step
Bumper Mount Arm Bolts	90119-A0454	4	n=2 from 2(e) n=2 from 3(a)
Bumper mounting Nuts	90178-A0114	2	3(i)
Bumper Mounting Bolts	90119-A0318	6	3(i)
Clip	90467-07215	19	n=12 from 3(b) n=1 from 3(f) n=2 from 3(g) n=4 from 3(k)
License Plate Light	81270-AK010	1	3(c)
Towing Wire Harness Connector	82824-0C150	1	3(e)
*BLE Antenna	890D0-78010	1	3(i)
Blind Spot Monitor	88162-AK020	2	3(j)
Blind Spot Monitor Nuts	90182-A0022	6	3(j)
*Smart Key Antenna ASSY	89997-0E050 89964-AK010 90080-17244	1 1 1	3(l)
*Smart Key Antenna ASSY Nuts	90080-17244	2	3(l)

\*if equipped



**Do not remove the center nut, the antenna should remain attached to the bracket.**



(m) Before proceeding to the next section, ensure all necessary parts being re-used have been saved. Use the table to the left to confirm each item and the respective quantities.

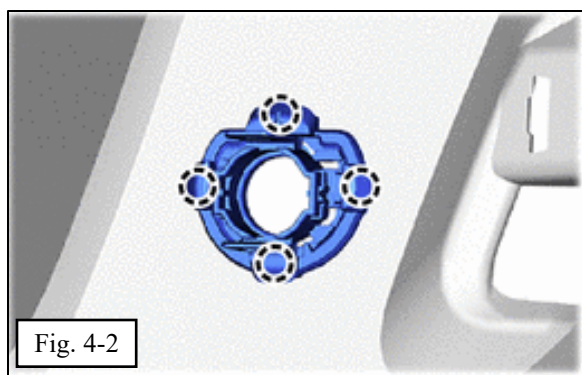
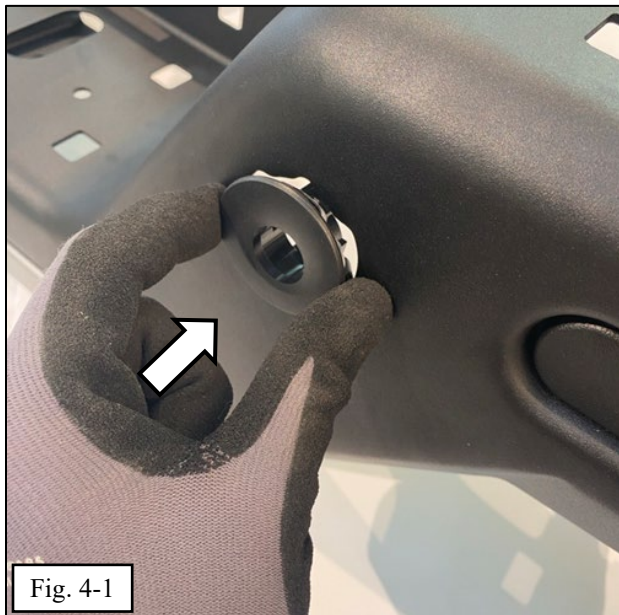
#### 4. Steel Bumper Assembly

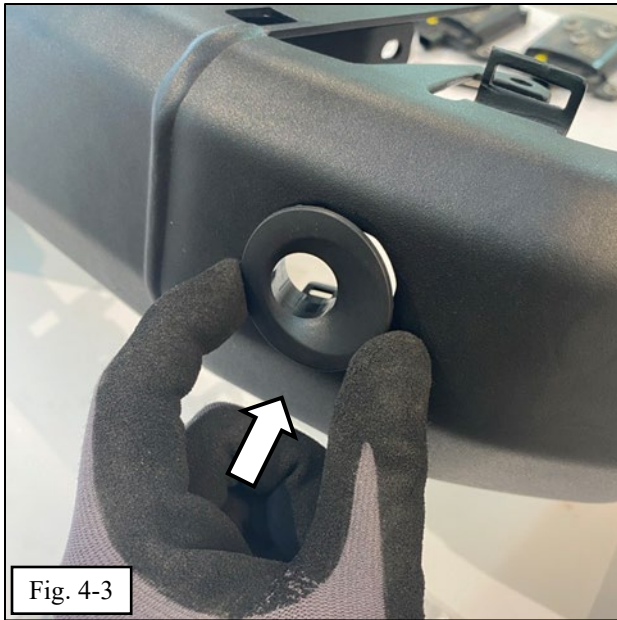
If PT989-3524B (With Sonar) is being installed, complete steps 4(a) through 4(e).

If PT989-3524E (Without Sonar) is being installed, skip to step 4(f).

- (a) Install the Center Sonar Retainers by pushing the part through the hole in the Steel Bumper (Fig. 4-1). Ensure the part is fully seated at all 4 tabs on the cushion (Fig. 4-2) and no visible gap between the retainer and the bumper.

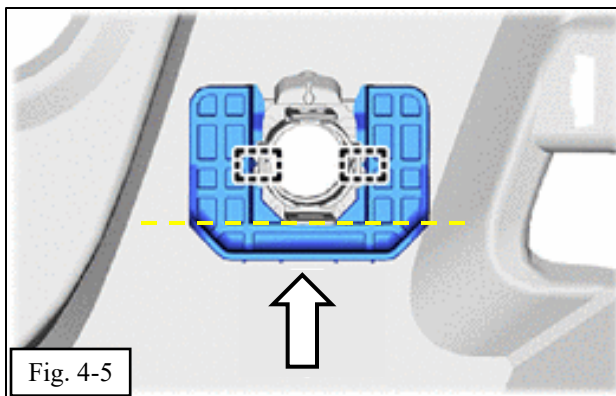
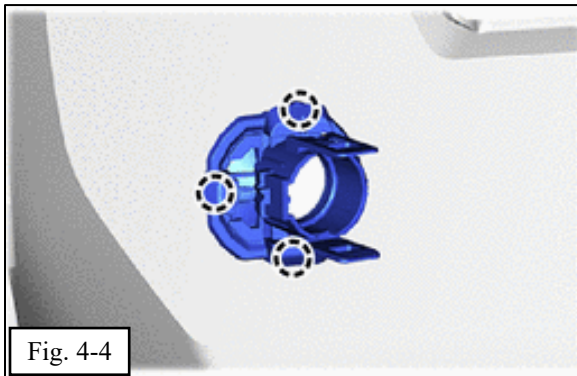
**NOTE:** RH shown, repeat for LH side





- (b) Install the Corner Sonar Retainers by pushing the part through the hole in the Steel Bumper (Fig. 4-3). Ensure the part is fully seated at all 3 tabs on the cushion (Fig. 4-4) and no visible gap between the retainer and bumper.

**NOTE: RH shown, repeat for LH side.**



- (c) Install the 4 Sonar Clips by sliding the part up from below each Sonar Retainer (Fig. 4-5). Be sure the clip is fully seated against the retainer (yellow dashed line in Fig. 4-5) as there should be no gap present at the bottom interface.

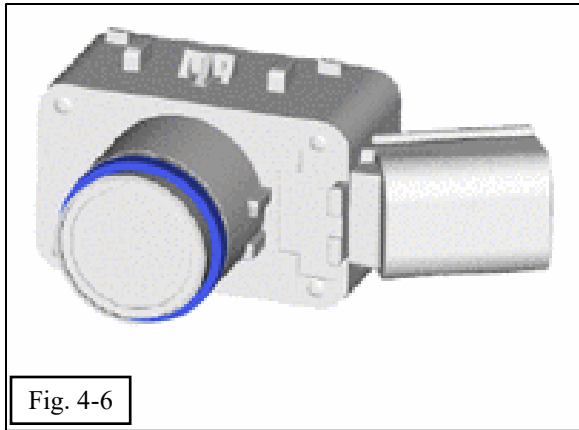


Fig. 4-6

- ⚠ (d) Inspect each of the 4 provided Parking Sonars to ensure that the cushions are uniformly seated around the part (blue portion of Fig. 4-6).

**NOTE: Replacement cushion set part number is 89305-33010 (set of 2).**

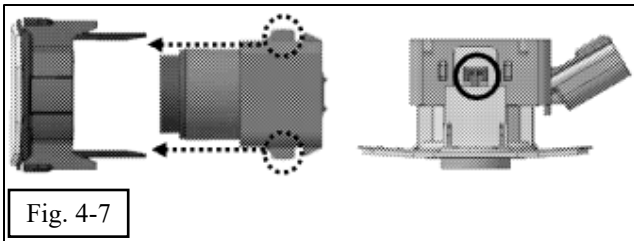


Fig. 4-7

- (e) Install the provided Parking Sonars in each of the 4 locations (Fig. 4-7).

- ⚠ Insert the Parking Sonar so that the wire harness connector faces outboard at each location (Fig. 4-8). Ensure that both tabs (top and bottom) engage at each location with an audible click.

**NOTE: Fig. 4-6 shows RH, mirror Parking Sonar orientation about vehicle centerline for LH side.**

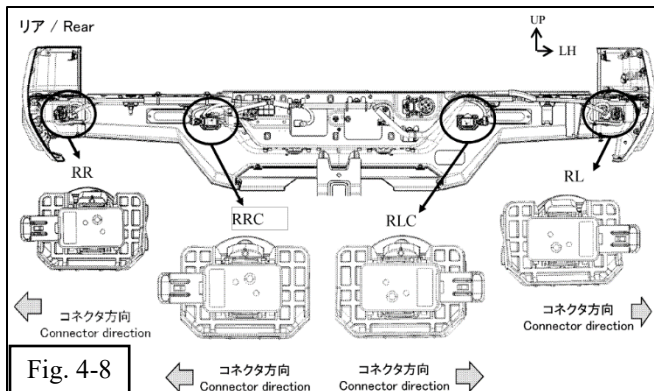
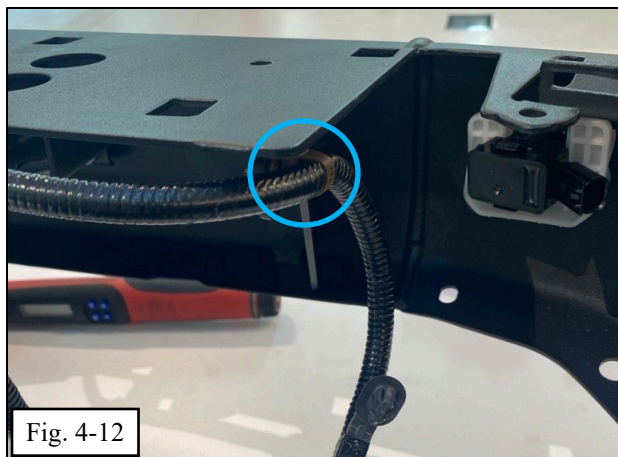
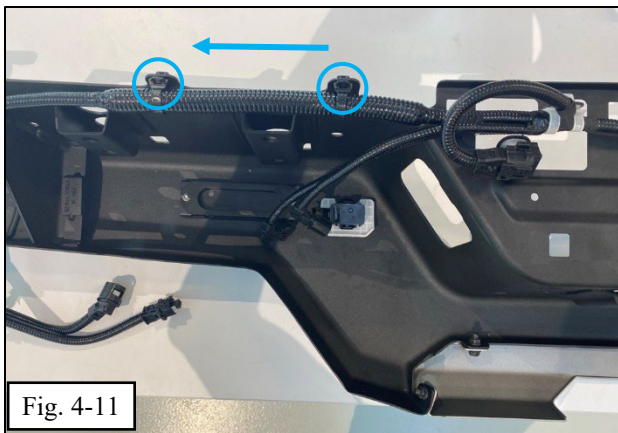
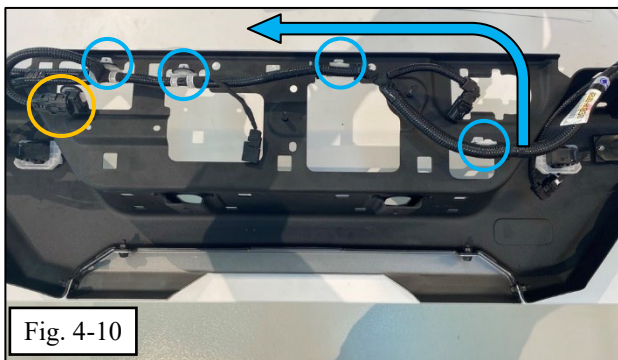
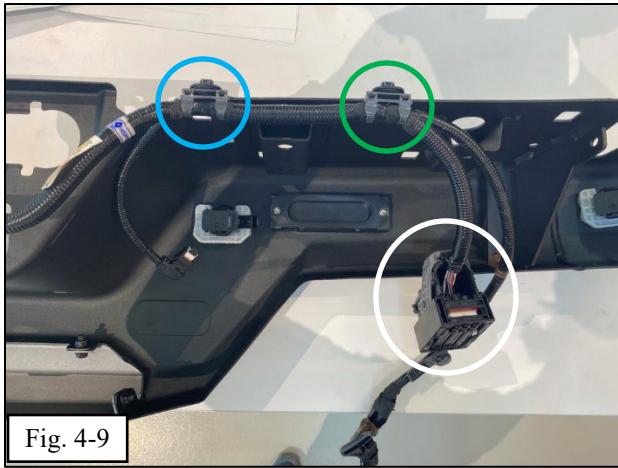


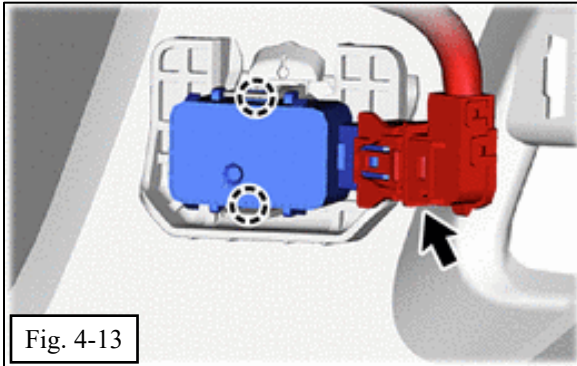
Fig. 4-8



- (f) Install the Rear Bumper Wire Harness to the Steel Bumper.
- i. Start on the LH side (Fig. 4-9). Break the slit tape on the wire harness. Locate the large lever connector (circled in white in Fig. 4-9) to establish a starting point. Insert the closest grey clip into the slot circled in green in Fig. 4-9 from the bottom side. Then attach the next clip circled in blue in Fig. 4-8 from the bottom side.
  - ii. At the center section of the bumper, continue installing the wire harness clamps from the bottom side working towards the RH side (circled in blue in Fig. 4-10). Then install the junction connector from the front side circled in orange in Fig. 4-10.
  - iii. On the RH side of the bumper, attach the remaining two wire harness clips from the bottom side (Fig. 4-11).
  - iv. On each end of the flat surface of the bumper, attach the brown wire harness clip to the bumper from the outboard side.

**NOTE: LH shown, repeat for RH side.**



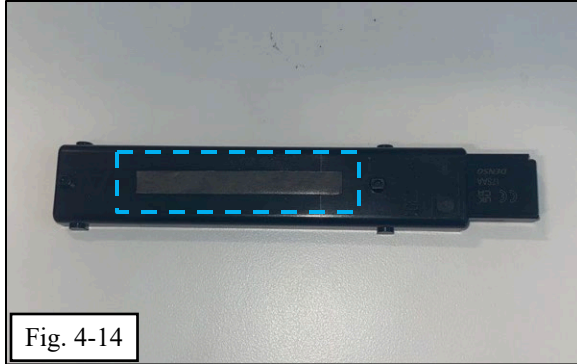


(g) If PT989-3524B (With Sonar) is being installed, connect the Rear Bumper Wire Harness to the Center Parking Sonars (black arrow in Fig. 4-13).

**⚠ NOTE: Lightly pull on the wire harness after each connector has been attached to ensure a proper connection.**

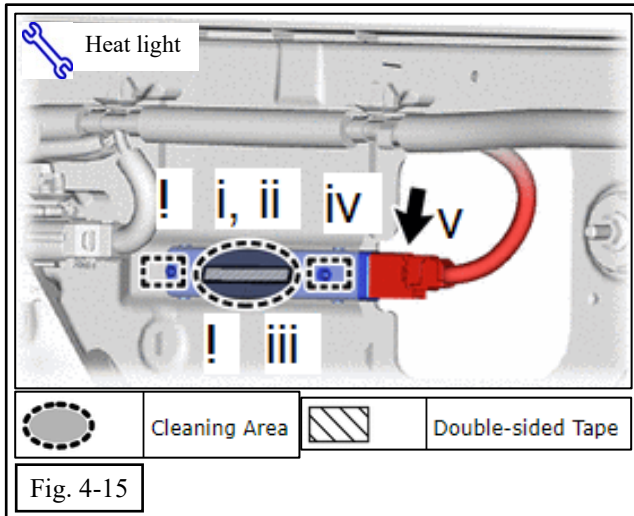
**⚠ DO NOT install the wire harness to the Corner Parking Sonars at this time. This will need to be completed at a later step.**

**If a BLE Antenna was removed from step 3(i), complete steps 4(h) and 4(j). If not, skip to step 4(k).**



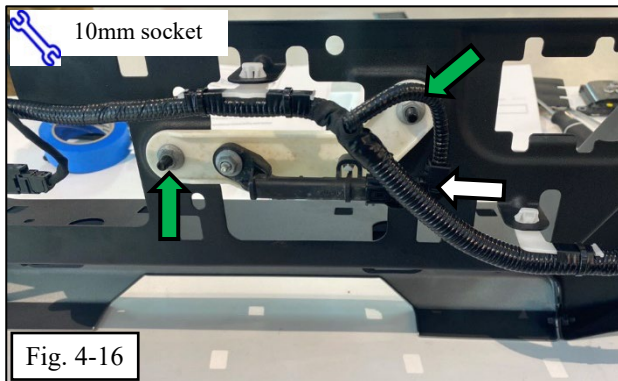
(h) Remove double-sided tape from the BLE Antenna (Fig. 4-14). Wipe off the surface with a clean cloth once all the tape has been removed.

(i) Apply the provided double-sided tape to the BLE Antenna. Remove only one of the release liners for this step. The tape location should be on the part centerline in between the two guides as shown in Fig. 4-14 (same location as the OE tape).



- (j) Install the BLE Antenna to the Steel Bumper (Fig. 4-15).
  - i. Use an approved cleaner to wipe off the installation area on the Steel Bumper.
  - ii. Use a heat light to heat the installation area on the Steel Bumper to 40° to 60° C.
  - iii. Align the BLE Antenna guides to the holes in the Steel Bumper and firmly press the part to adhere.
  - iv. Connect the wire harness connector to the BLE antenna (black arrow in Fig. 4-15).

**⚠ NOTE: Lightly pull on the wire harness after each connector has been attached to ensure a proper connection.**



- (k) If equipped, install the Smart Key Antenna Assembly to the Steel Bumper (Fig. 4-16).
  - i. Attach the Smart Key Antenna Assembly to the Steel Bumper using a 10mm socket in 2 locations (green arrows in Fig. 4-16).

**Torque: 7 Nm (62 in lb)**

**NOTE: Re-use the nuts previously removed from the OE resin bumper.**

- ii. Attach the wire harness connector to the antenna (white arrow in Fig. 4-16).

**⚠ NOTE: Lightly pull on the wire harness after each connector has been attached to ensure a proper connection.**

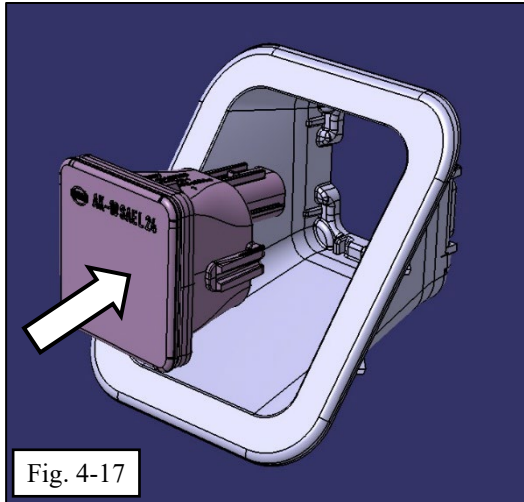


Fig. 4-17

- (l) Attach the previously removed License Plate Lamp to the Steel Bumper LPL Bezel (Fig. 4-17). Ensure both claws on the lamp engage to the bezel.

**NOTE:** The parts contain features to ensure the lamp is oriented properly upon installation and are shown in Fig. 4-18. Align the tab on the lamp to the slot in the bezel.



Fig. 4-18

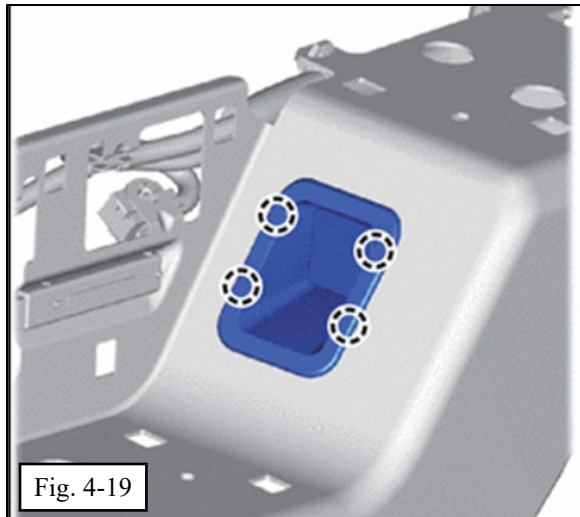


Fig. 4-19

- (m) Install the LPL Bezel with Lamp to the Steel Bumper (Fig. 4-19).
  - i. Attach the LPL Bezel with Lamp to the bumper by inserting the assembly through the hole in the bumper from the inboard side.

**NOTE:** The claws are facing the front and the ribs are facing the rear of the vehicle in the installed position.

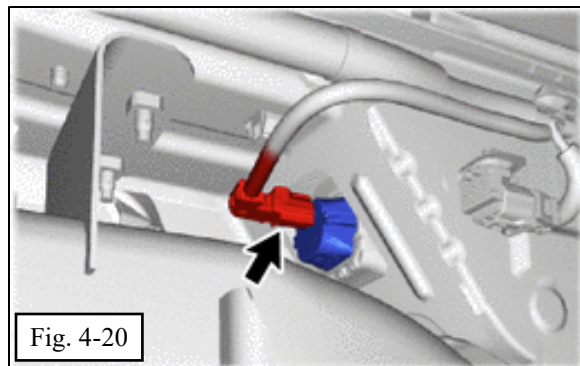


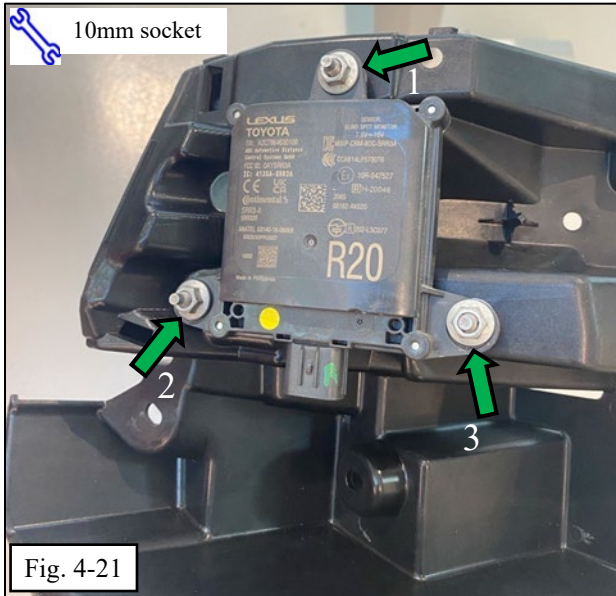


Fig. 4-20

-  ii. Connect the wire harness to the License Plate Lamp (Fig. 4-20).

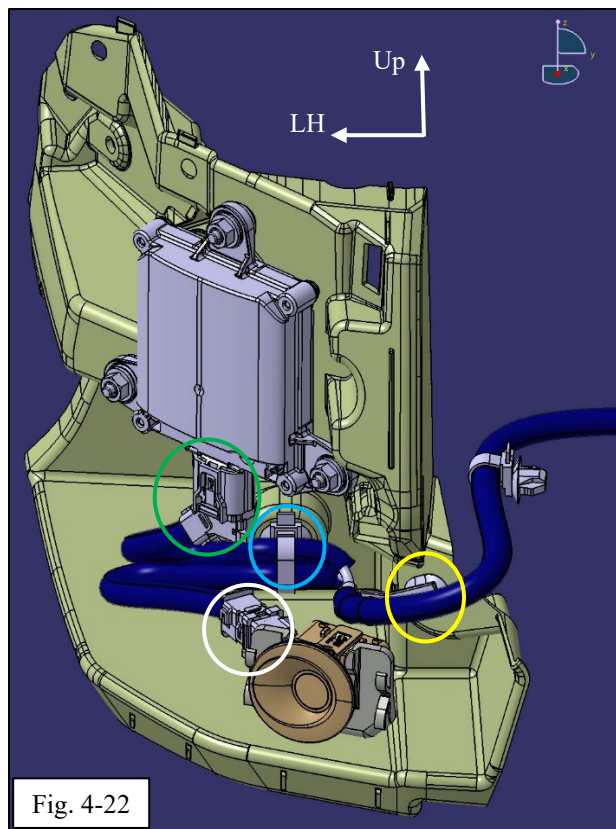
 **NOTE:** Lightly pull on the wire harness after each connector has been attached to ensure a proper connection.



(n) Attach the previously removed Blind Spot Monitors to the Steel Bumper BSM Housings using a 10mm socket (Fig. 4-21). Follow the fastening order shown in Fig. 4-21. The fasteners removed from the OE resin bumper should be re-used.

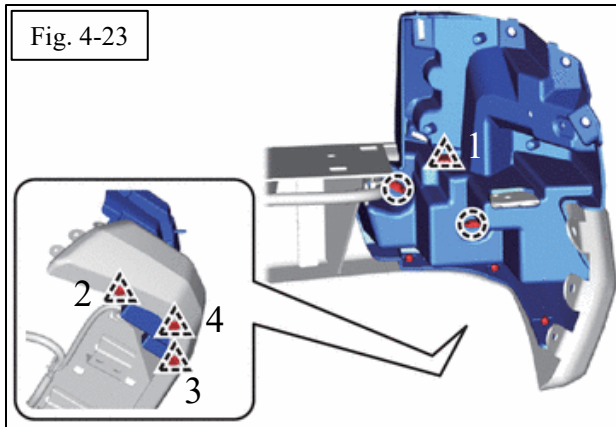
**Torque: 10 Nm (89 in lb)**

**NOTE: RH shown, repeat for LH side.**



(o) Install the BSM Housings to the Steel Bumper.

- i. Bring the BSM Housing close to the Steel Bumper from the front side.
- ii. Attach the wire harness clips at 2 locations on the BSM Housing. Fig. 4-22 shows the wire harness routing (Steel Bumper is hidden for visibility). The grey clip on the part is represented by the yellow circle in Fig. 4-22 and the brown clip is represented by the blue circle in Fig. 4-22.
- iii. Connect the wire harness to the Blind Spot Monitor as shown by the green circle in Fig. 4-22.
- iv. Connect the wire harness to the Corner Parking Sonar as shown by the white circle in Fig. 4-22.



- v. Correctly orient the BSM Housing and insert into the Steel Bumper.

**⚠ NOTE:** Use caution when feeding the BSM housing into place to avoid snagging the Blind Spot Monitor and/or the wire harness.

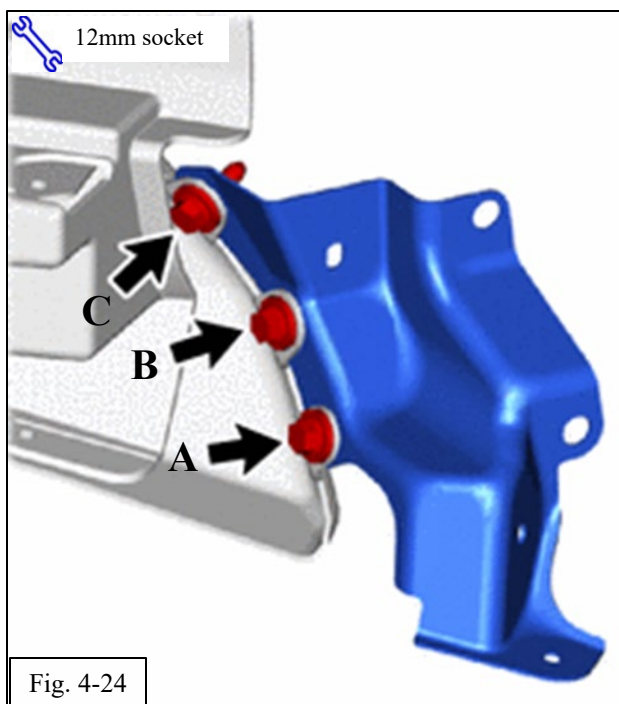
- vi. Install 4 of the clips being re-used from the OE resin bumper into the BSM housing for attachment to the Steel Bumper.

**NOTE:** The sequence of clip installation is shown in Fig. 4-23.

**⚠ NOTE:** Lightly pull on the wire harness after each connector has been attached to ensure a proper connection.

**4 clips each side for a total of 8 clips used in this step.**

**LH shown, repeat for RH side.**



- (p) Install the Peninsula Brackets to the Steel Bumper using a 12mm socket (Fig. 4-24). Use the M8 bolts provided in the Steel Bumper kit for this step.

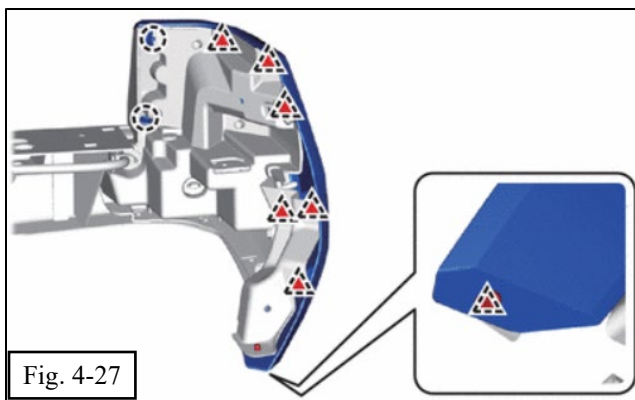
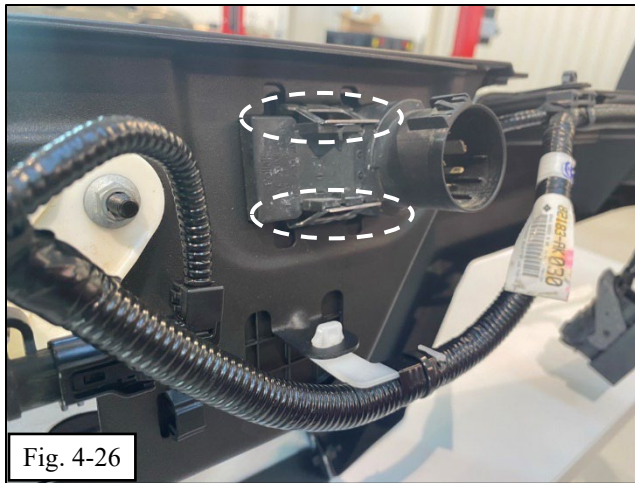
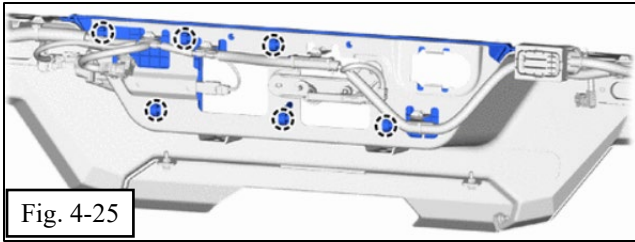
Installation sequence:

- i. Temp set bolt C
- ii. Fully tighten bolt A
- iii. Fully tighten bolt C
- iv. Fully tighten bolt B

**Torque: 30 Nm (22 ft lb)**

**NOTE:** Use caution when tightening these bolts as the entire bumper assembly will tend to rotate if it is just sitting on a table.

**LH shown, repeat for RH side.**



(q) Install the Center Resin Panel to the Steel Bumper (Fig. 4-25). Push the panel onto the bumper at each claw location circled in Fig. 4-25. Visually inspect that all 6 claws are fully engaged.

(r) Install the previously removed Towing Wire Harness Connector onto the Steel Bumper (Fig. 4-26). Push the connector onto the bumper from the back side and visually confirm both claws are fully engaged. There should be an audible click when part is properly attached.



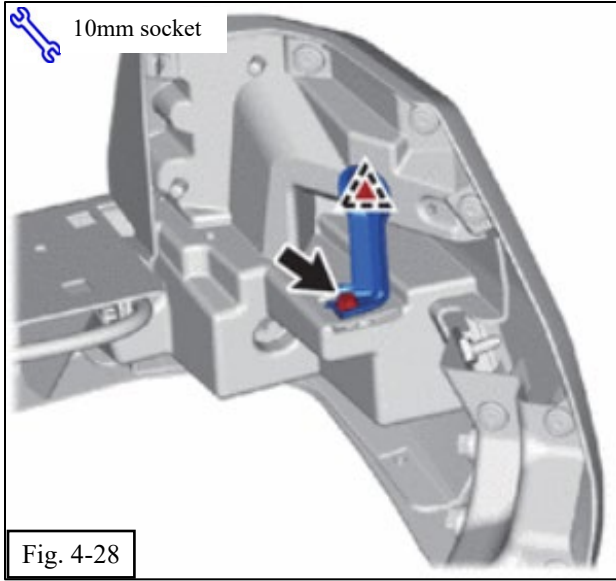
(s) Re-install the vehicle license plate using the same fasteners from the OE resin bumper.

(t) Install the Radome to the Steel Bumper assembly (Fig. 4-27). Start by engaging the claws (circled in Fig. 4-27) to hold the Radome to the BSM Housing. Then install 7 clips to retain the Radome to the various components of the Steel Bumper assembly. These locations are indicated with triangles in Fig. 4-27.

**NOTE: 7 clips per side for a total of 14 clips used in this step.**

**There should be 11 clips remaining which were previously removed from the OE resin bumper. Use those clips and then use 3 of the provided clips in the kit.**

**LH shown, repeat for RH side.**

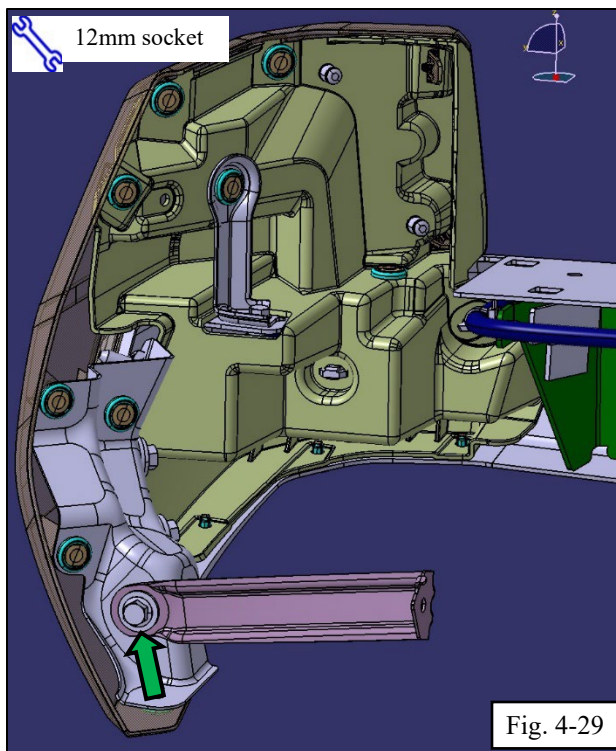


- (u) Install the L-Brackets to the Steel Bumper assembly using a 10mm socket (Fig. 4-28).
  - i. First install the L-Bracket provided M6 bolt as shown by the black arrow in Fig. 4-28.

**Torque: 14 Nm (124 in lb)**

- ii. Then install the provided clip attaching the L-Bracket to the BSM Housing (shown with a triangle in Fig. 4-28).

**NOTE: LH shown, repeat for RH side.**



- (v) Temp set the provided Bumper Mount Arms to the Steel Bumper assembly using the fasteners previously removed from the OE Bumper Mount Arms with a 12mm socket (Fig. 4-29).

**NOTE: The face of the Bumper Mount Arm attaching to the bumper does not have the anti-rotation tab.**

**Allow the Bumper Mount Arms to freely swing downward. The orientation will be fixed when installing to the vehicle.**

**RH shown, repeat for LH side.**

**⚠ NOTE: DO NOT install the provided step pads yet. These parts are non-reusable and will be installed after completion of all electronics calibration.**



### 5. Steel Bumper Installation

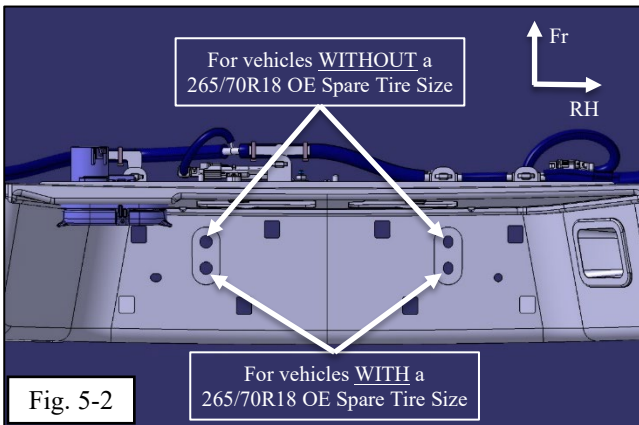
- (a) Set the Steel Bumper assembly to the vehicle (Fig. 5-1).

The Steel Bumper contains two sets of clearance features for the studs (Fig. 5-2)

The front set is used for vehicles WITHOUT a 265/70R18 OE spare tire size.

The rear set is used for vehicles WITH a 265/70R18 OE spare tire size.

Confirm the OE spare tire size by reviewing the tire pressure label applied on the driver door jamb.



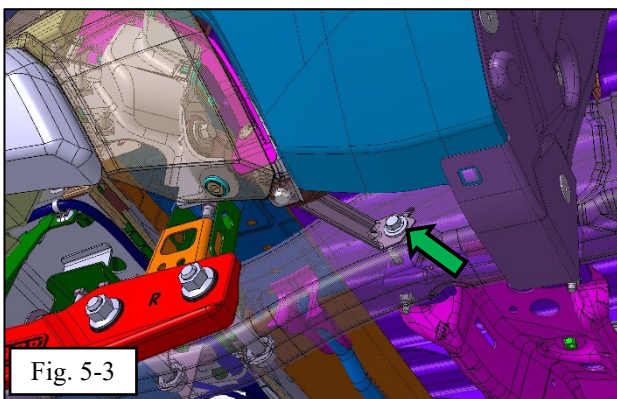
**NOTE: Due to the weight and size of the bumper, this is a two-person task.**



**Use caution to ensure the Steel Bumper does not scratch any painted surfaces on the vehicle or the rear combination lamp lens.**



**Ensure that the wire harness and lever connector are routed over the rear crossmember and not snagged.**



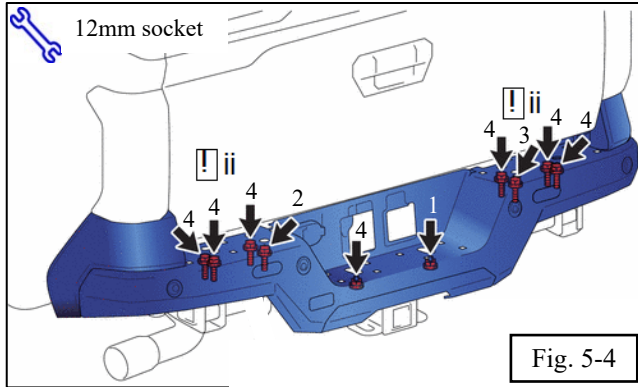
- (b) Temp set the Bumper Mount Arms to the vehicle frame using the bolts previously removed from the OE Bumper Mount Arms (Fig. 5-3).

**NOTE: RH shown, repeat for LH side.**

- (c) Visually inspect gaps and adjust the bumper position as needed before tightening.

**NOTE: Inspect the bumper relative to the rear combination lamps and the deck side outer on each side of the vehicle. Each side should have similar gaps.**





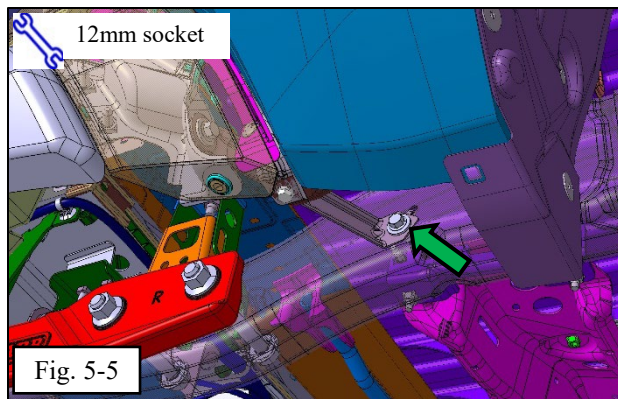
(d) Install the 2 nuts and 8 bolts attaching the Steel Bumper to the frame using a 12mm socket. Tighten the fasteners as indicated.

1. RH nut
2. LH rear inboard bolt
3. RH rear inboard bolt
4. All other fasteners (in any order)

**Torque: 25 Nm (18 ft lb)**



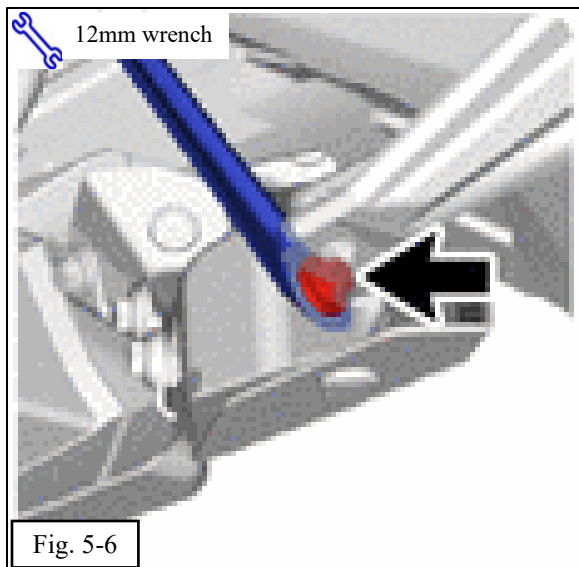
**NOTE: Use caution while inserting the socket to torque the fasteners to avoid scratching the coated surfaces on the bumper and tailgate.**



(e) Tighten the Bumper Mount Arms to the frame using a 12mm socket (Fig. 5-5).

**Torque: 24 Nm (18 ft lb)**

**NOTE: RH shown, repeat for LH side.**

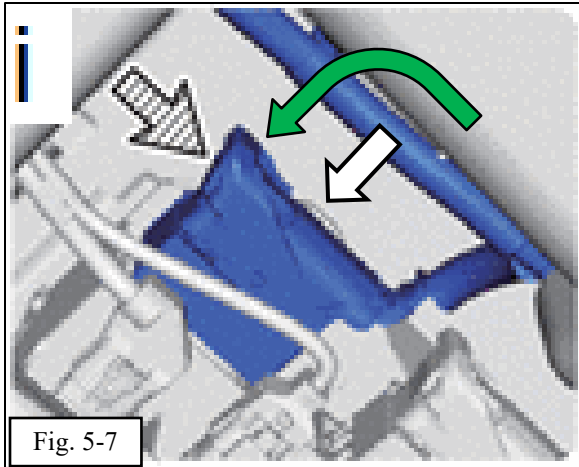


(f) Tighten the Bumper Mount Arm to the Steel Bumper using a 12mm wrench (Fig. 5-6).

**Torque: 24 Nm (18 ft lb)**

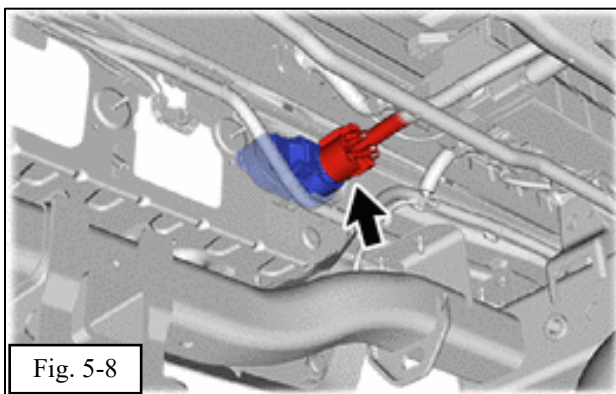
**NOTE: Tool clearance may not allow most torque wrenches to be used. If needed, select an open-end or box wrench which can access the bolt. Place the wrench on the bolt tightened in step 5(e) and turn just until the slip (bolt rotating) point is reached. Apply the similar torque feel for the bolt in this step.**

**LH shown, repeat for RH side.**



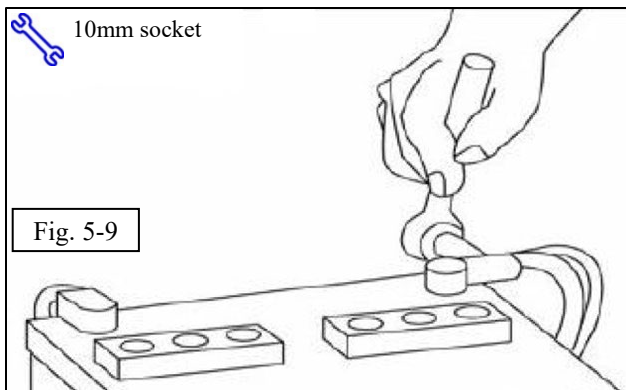
- (g) Connect the lever connector on the Rear Bumper Wire Harness (Fig. 5-7). Firmly push the lever connector to the mating connector on the vehicle side (white arrow). Then rotate the lever as shown with the green arrow to lock the connection.

**NOTE:** Lightly pull on the wire harness after the connector has been attached to ensure a proper connection.



- (h) Connect the towing wire harness to the Towing Wire Harness Connector (Fig. 5-8).

**NOTE:** Lightly pull on the wire harness after the wire harness has been attached to ensure a proper connection.



- (i) Reconnect the negative cable for 12V battery using a 10mm socket (Fig. 5-9).

**Torque: 5.4 Nm (48 in lb)**



- (j) If the vehicle is a Double Cab, lower the rear seat bottom to its original position. If the vehicle is a hybrid, install the 3 clips previously removed (Fig. 5-10).

- (k) If equipped, stow the Bed Step back to its original position.

## 6. Electronics Calibration

- (a) Perform vehicle health check using GTS+ and ensure no Diagnostic Trouble Codes (DTC's) are output as a result of the rear steel bumper installation.
  
- (b) If PT989-3524B (With Sonar) is being installed, follow the repair manual procedure for calibration of the rear Parking Sonars.  
*Repair manual >> Audio / Visual / Telematics >> PARK ASSIST / MONITORING >> PARKING SUPPORT BRAKE SYSTEM >> CALIBRATION*

**NOTE: It is only necessary to complete the steps relevant to the rear sensors as no changes were made to the front.**

- (c) Follow the repair manual procedure for adjustment of the Blind Spot Monitor sensors.  
*Repair manual >> Audio / Visual / Telematics >> PARK ASSIST / MONITORING >> BLIND SPOT MONITOR SENSOR >> ADJUSTMENT*

**NOTE: Be sure to carefully confirm the vehicle specifications and use the proper angles for the newly installed steel bumper.**

### 7. Step Pad Installation



- (a) Install the provided Center Step Pad to the Steel Bumper (Fig. 7-1). Engage all 8 claws by firmly pressing down on the step pad around the top surface. There should be audible clicks to indicate engagement has been made.


Visually confirm all edges of the step pad are seated and there are no gaps to the mounting surface.



- (b) Install the provided RH Step Pad and LH Step Pad to the Steel Bumper (Fig. 7-2). Engage all 6 claws on each part by firmly pressing down on the step pad around the top surface. There should be audible clicks to indicate engagement has been made.

Visually confirm all edges of the step pads are seated and there are no gaps to the mounting surface.

**TOYOTA TACOMA, HV 2024 - REAR STEEL BUMPER**  
 Checklist - these points **MUST** be checked to ensure a quality installation.

Check:	Look For:
<p><u>Accessory Function Checks</u></p> <p><input type="checkbox"/> Verify parts</p> <p><input type="checkbox"/> Intuitive Parking Assist (if equipped)</p>	<p>Removed items have been discarded &amp; replaced items are in place.</p> <p>Verify the Intuitive Parking Assist System functions by placing the vehicle in reverse and having someone walk around the vehicle.</p>
<p><u>Vehicle Function Checks</u></p> <p><input type="checkbox"/> License Plate Light</p> <p><input type="checkbox"/> Automatic tailgate function (if equipped)</p> <p><input type="checkbox"/> Rear Bumper Fit/Clearance</p>	<p> Ensure that license plate light illuminates when vehicle headlamps are switched to “DRL” or “On” position.</p> <p>With the vehicle locked, approach the vehicle from the rear and operate the automatic tailgate to confirm the antennas are receiving signal from the Smart Key and Digital Key (if equipped).</p> <p>Visually inspect the gaps and clearances on both sides of the bumper.</p>
<p><u>Vehicle Appearance Check</u></p> <p><input type="checkbox"/> After accessory installation and removal of protective cover(s), perform a visual inspection.</p>	<p>Ensure no damage (including scuffs and scratches) was caused during the installation process.                      (For PPO installations, refer to TMNA Accessory Quality Shipping Standard.)</p>