

Part Number: PT989-35267

Kit Contents

Item #	Quantity Req.	Description
1	1	RH V-Brace
2	1	LH V-Brace
3	1	RH L-Brace
4	1	LH L-Brace
5	2	RCL Reinforcement
6	1	Hardware Bag

Hardware Bag Contents

Item #	Quantity Req.	Description
1	4	T-Slot Nut
2	14	M8x1.25x25 Bolt (Blue Patch)
3	12	M8x26x4 Washer
4	2	M8x19x2 Washer
5	4	M6x1.0x30 Bolt (Blue Patch)
6	4	M6x18x3 Washer
7	2	SAE 7/16"-20 Bolt
8	2	SAE Washer
9	2	Collar
10	2	RCL Guide (Green)
11	2	RCL Guide (Pink)

Vehicle Service Parts (may be required for reassembly)

Item #	Quantity Req.	Description
1	2	90467-A0045 Clip (RCL Guide)
2	2	90467-A0046 Clip (RCL Guide)

Additional Items Required For Installation

Item #	Quantity Req.	Description
1		

General Applicability

Vehicles with Bed Side Rails

Conflicts

Sport Bar, Bed Rack, Spray-In Bed Liner, Tonneau Cover (Hard and Soft), Bed Extender, Swing Out Storage Box

Recommended Sequence of Application








Item #	Accessory
1	*Bed Molle Panels
2	*Bed Reinforcement Kit

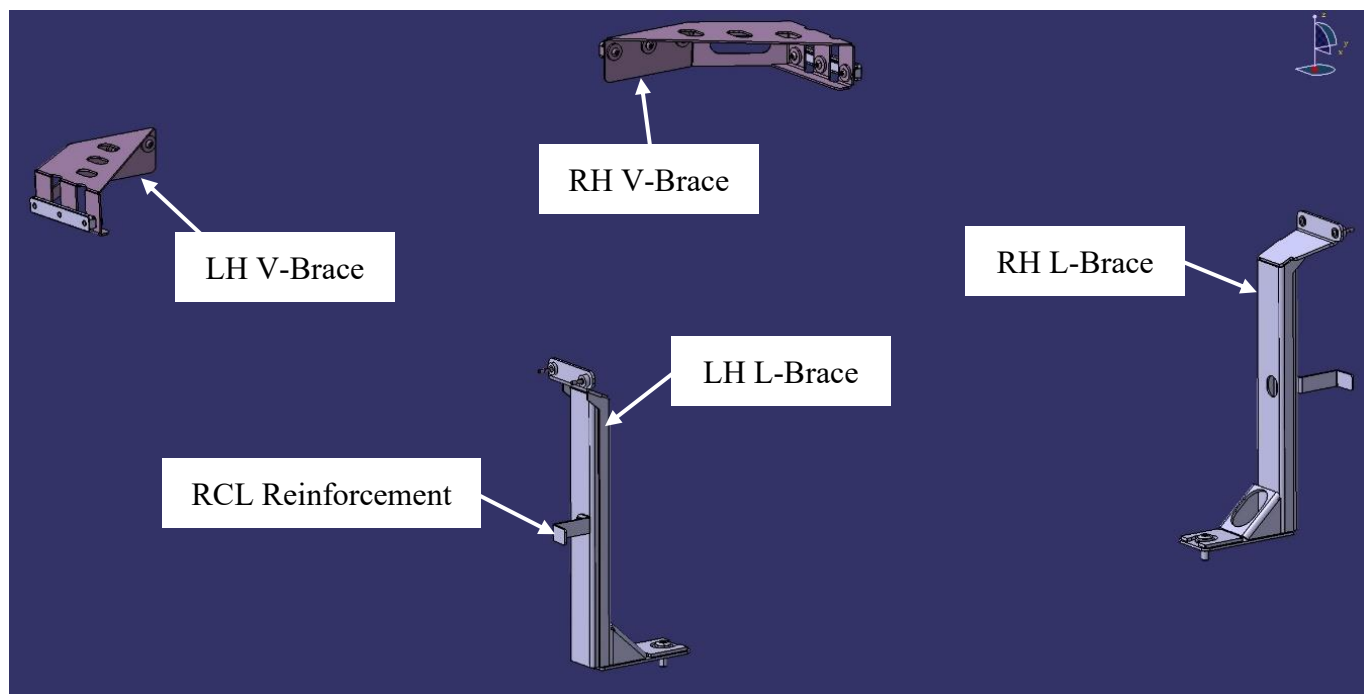
*Mandatory

Recommended Tools

Personal & Vehicle Protection	Notes
Knee pads	
Portable light	
Special Tools	Notes
Vehicle Protection	Blankets or Fender Covers Protective tape
Installation Tools	Notes
Torque wrench	Square drive (0-75 Nm)
Torx sockets	T25, T30, T40, T50, T55
Socket	10mm
Ratchet	
Nut runner	
Drive extender	~3"
Drill	
Drill bits	5mm, 12mm
Drill stop	Applicable for 5mm and 12mm bits
Deburring tool	
Pin	6mm
Vacuum	
Clip removal tool	
Needle nose pliers	
Special Chemicals	Notes
Sealant	3M Autobody Sealant

Legend

	STOP: Damage to the vehicle may occur. Do not proceed until process has been complied with.
	OPERATOR SAFETY: Use caution to avoid risk of injury.
	CAUTION: 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.
	TOOLS & EQUIPMENT: Used in Figures calls out the specific tools and equipment recommended for this process.
	REVISION MARK: This mark highlights a change in installation with respect to previous issue.
	SAFETY TORQUE: This mark indicates that torque is related to safety.
	REGULATORY MARK: This mark indicates the component is related to regulatory compliance



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.).

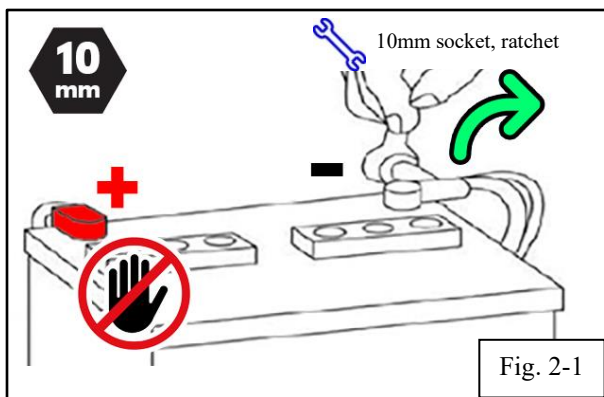
Please see your Toyota dealer for a copy of this document.

1. Parts and Vehicle Preparation

- Check kit for contents and damage.
- Apply vehicle protection to rear portion of cab to protect glass and painted surfaces.

2. Vehicle Attachment Points Preparation

- Lower vehicle tailgate
- Disconnect negative terminal on 12V Battery using a 10mm socket (Fig. 2-1).



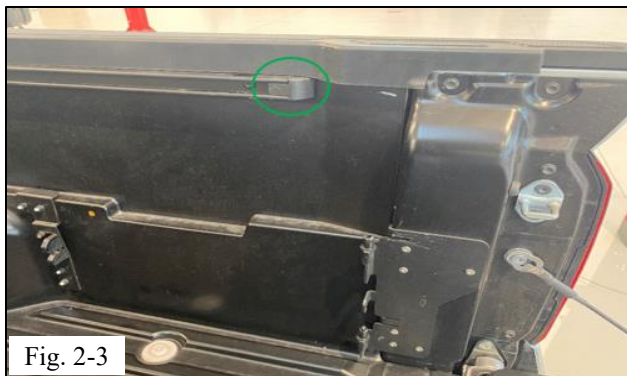
⚠ NOTE: Keep negative cable away from the battery terminal to avoid accidentally reconnecting the 12V power if the cable falls back to its natural shape.

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 place.





(c) Remove Bed Side Rail rear End Caps (Fig 2-3).



NOTE: DO NOT discard, these will be re-installed at a later step

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



(d) Remove rearmost fastener for Bed Side Rails (Fig. 2-4) using a T30 socket.



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

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



Do not use power tools as bolt head is easily stripped. **Hand tools only.**



(e) Slide T-Slot Nuts into bed side rails (Fig. 2-5).

NOTE: 1 part per side



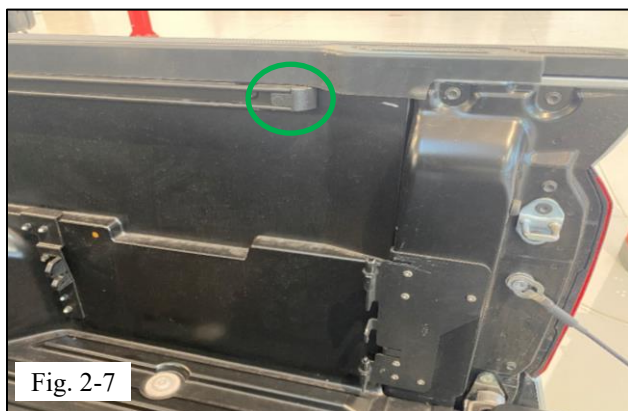
(f) Re-install rearmost fastener for Bed Side Rails using a T30 socket (Fig. 2-6).

Torque: 9 Nm (80 in lb)

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

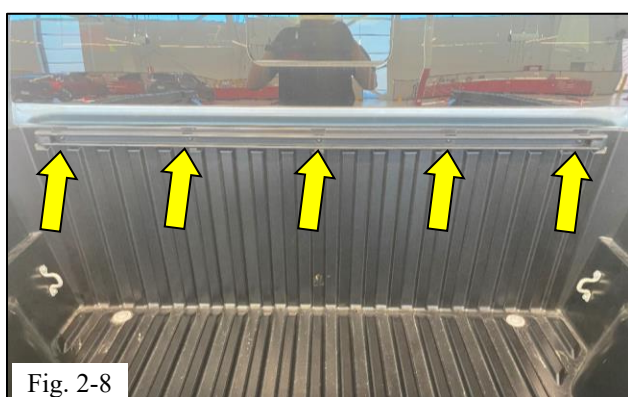


Do not use power tools as bolt head is easily stripped. **Hand tools only.**



(g) Re-install Bed Side Rail rear End Caps as shown in Fig. 2-7.

NOTE: RH shown, repeat for LH side



(h) Remove Front Bed Rail (Fig. 2-8) by removing 5 fasteners with a T30 socket.

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

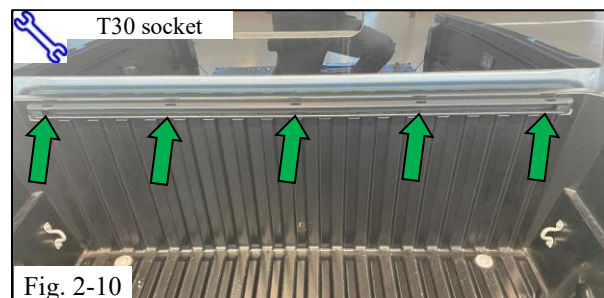
⚠ Do not use power tools as bolt head is easily stripped. Hand tools only.



(i) Remove RH end cap from the front bed rail and insert 2 T-Slot Nuts (Fig. 2-9).

(j) Re-install the RH end cap after inserting the T Slot Nuts.

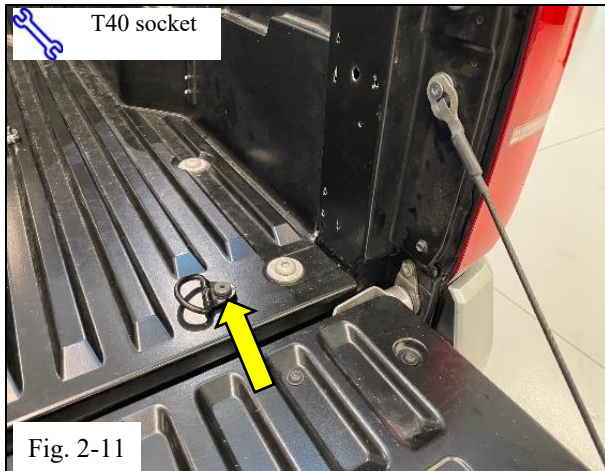
(k) Re-install front bed rail using 5 fasteners previously removed using a T30 socket (Fig. 2-10).



TORQUE: 9 Nm (80 in lb)

⚠ NOTE: Do not use power tools as bolt head is easily stripped. Hand tools only.

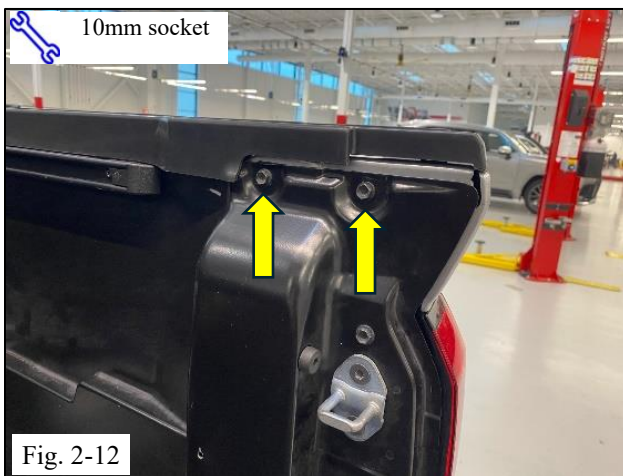
Center hole is primary part datum. Install this bolt first then work outboard to ensure part fully installs.



- (l) Remove D-Ring Hook from rear of bed using a T40 socket (Fig. 2-11).

NOTE: Discard these assemblies as they will not be reused.

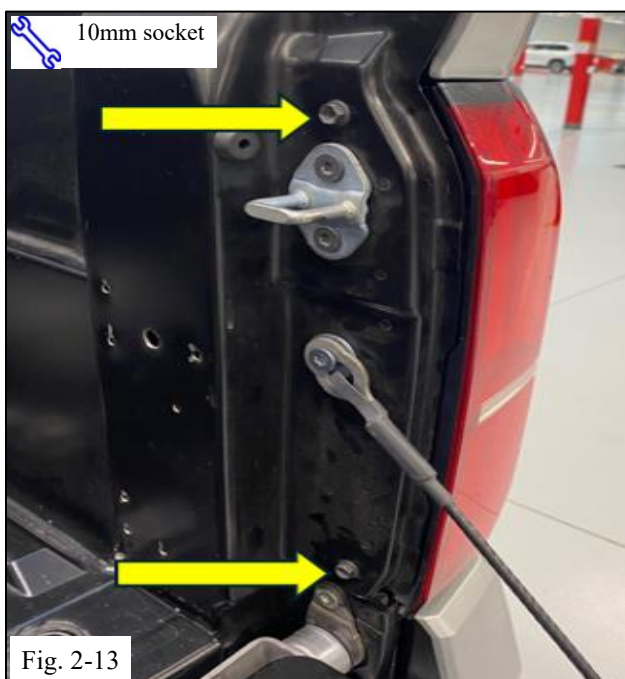
RH shown, repeat for LH side.



- (m) Remove 2 fasteners from the RH D-pillar using a 10mm socket (Fig. 2-12).

NOTE: Discard fasteners as they will not be reused.

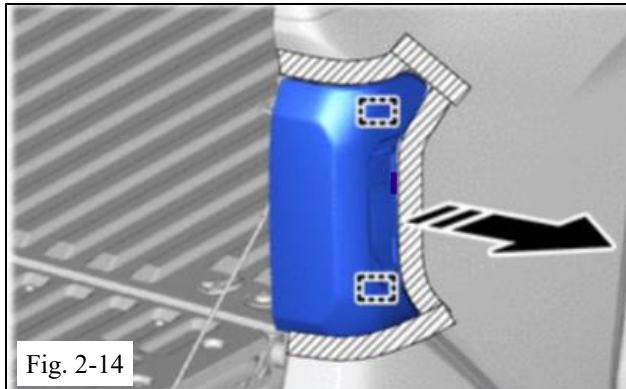
RH shown, repeat for LH side.



- (n) Remove Rear Combination Lamp (RCL) bolts using a 10mm socket (Fig. 2-13).

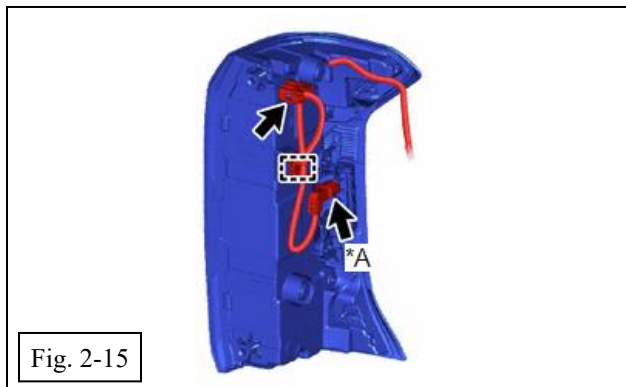
⚠ NOTE: DO NOT discard fasteners as they will be reused.

RH shown, repeat for LH side.



(o) Apply protective tape around Rear Combination Lamp (Fig. 2-14).

NOTE: RH shown, repeat for LH side.

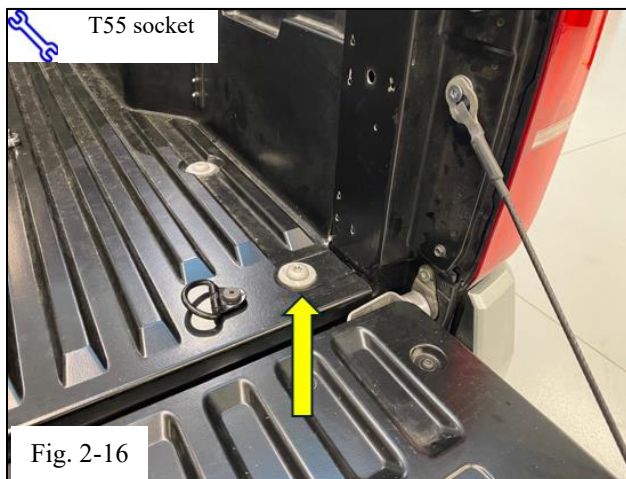


(p) Pull Rear Combination Lamp outboard to detach from the vehicle (Fig. 2-14). Disconnect the wire harness clip and connector(s) (Fig. 2-15) then set the part aside.

⚠ NOTE: Use caution to avoid bending or scratching components.

⚠ Carefully place Rear Combination Lamp in a safe space to avoid scratching the lens.

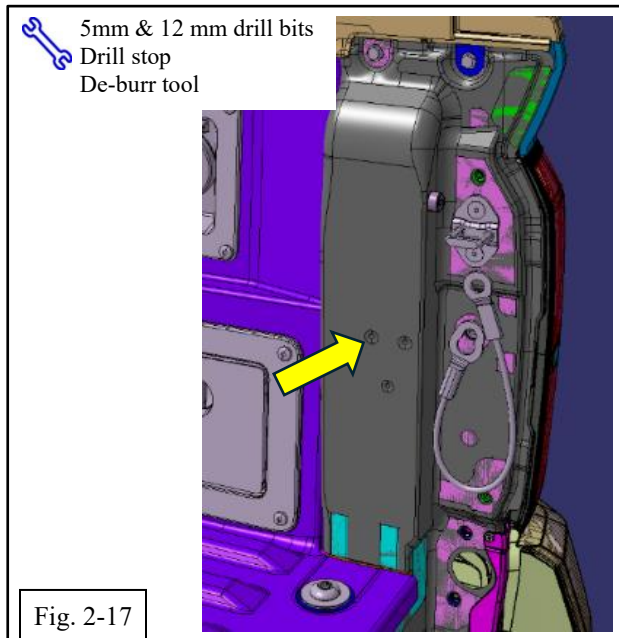
RH shown, repeat for LH side.



(q) Remove rearmost deck mount fastener using a T55socket (Fig. 2-16).

⚠ NOTE: DO NOT discard fasteners as they will be reused.

RH Shown, repeat for LH side.

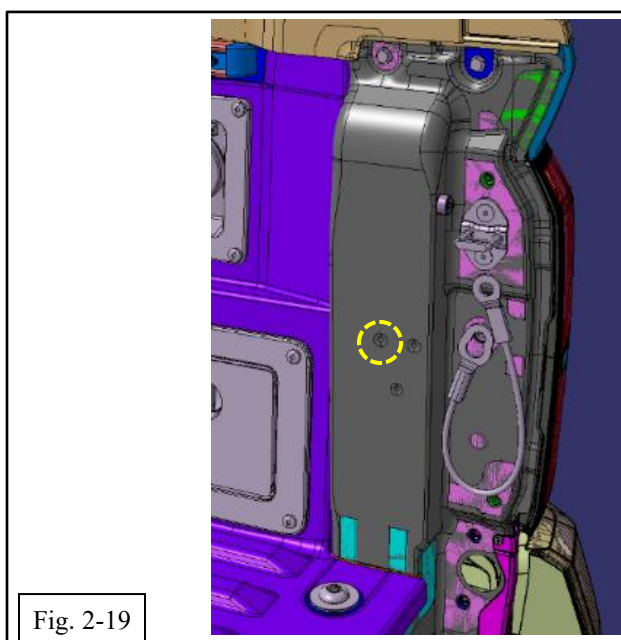
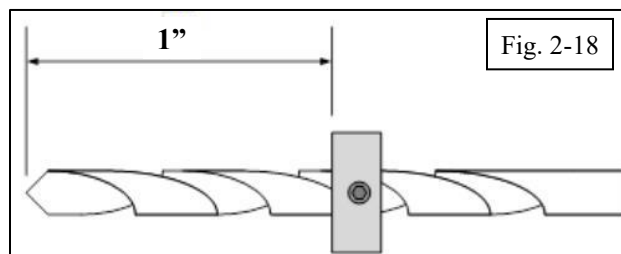


- (r) Drill hole through frontmost D-pillar dimple as shown in Fig. 2-17. Use a 5mm drill bit for a pilot hole then drill hole size to 12mm. For both drill bit sizes, use a drill stop set to 1" as shown in Fig. 2-18. After completion of drilling, de-burr the hole.



NOTE: A drill stop shall be used to ensure the drill bit does not penetrate the tailgate strut boot within the D-pillar (for vehicles equipped with automatic tailgate).

RH shown, repeat for LH side.

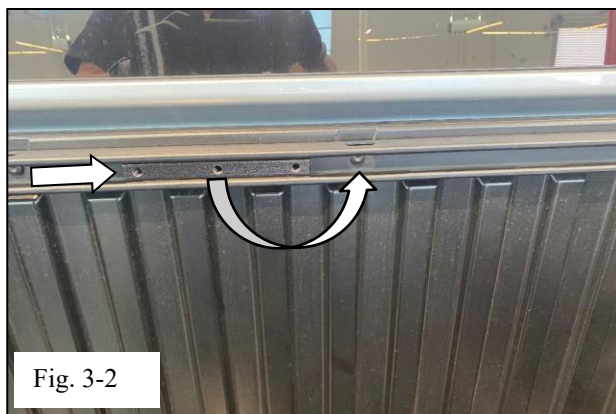
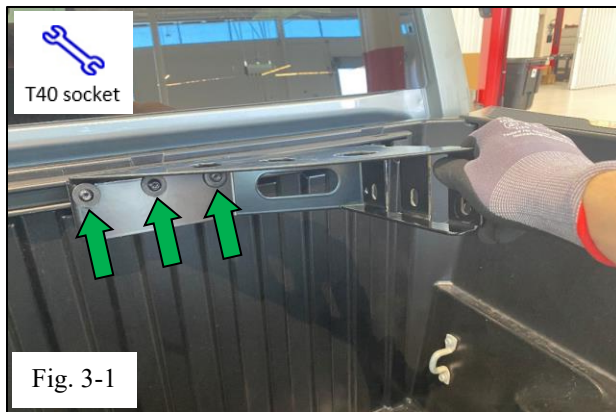


- (s) Vacuum out the bed around areas drilled in step 2(r) to collect chips and debris.

- (t) Apply autobody sealant around the holes drilled in the D-pillar (Fig. 2-19). Be sure to apply on both sides of the panel for full coverage.



NOTE: Ensure sealant is covering all bare metal for corrosion prevention.



3. Install Bed Reinforcement Kit Components to Vehicle

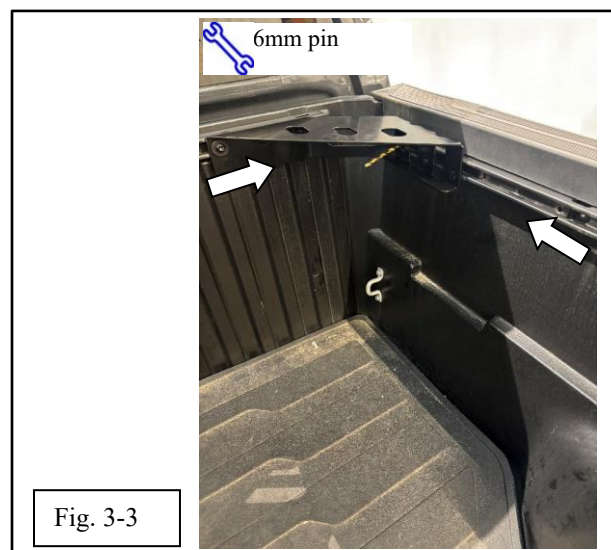
- (a) Hand start 3 M8x1.25x25 bolts (blue patch) with M8x26x4 washers to set the V-Brace to the Front Bed Rail using a T40 socket (Fig. 3-1).

HINT: Align the T-Slot Nut middle point with a bolt used for the Front Bed Rail. Install the middle bolt first to prevent the T-Slot Nut from rotating into the rail (Fig. 3-2).

NOTE: DO NOT torque fasteners, These must be left loose for continued assembly.

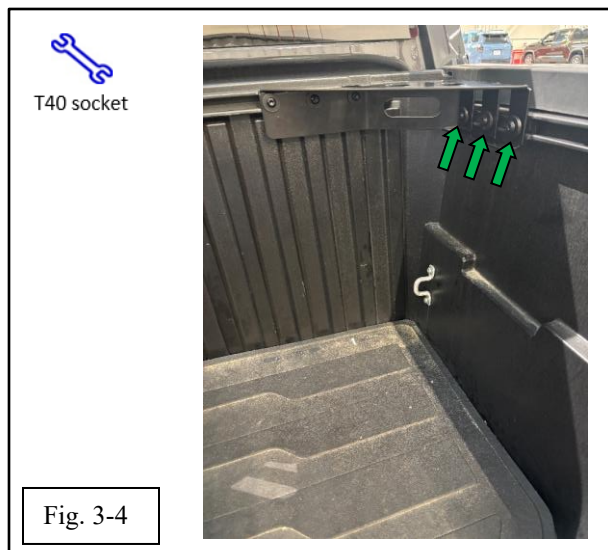
⚠ Do not use power tools as bolt head is easily stripped. Hand tools only.

RH shown, repeat for LH side.



- (b) Align the T-Slot Nut in the Bed Side Rail with the V-Brace. Move the V-Brace outboard to align with the Bed Side Rail. Insert a 6mm pin through the clearance hole. Push the T-Slot Nut forward in the Bed Side Rail until it contacts the pin (Fig. 3-3). Remove the pin once the T-Slot Nut is in position.

NOTE: RH shown, repeat for LH side.

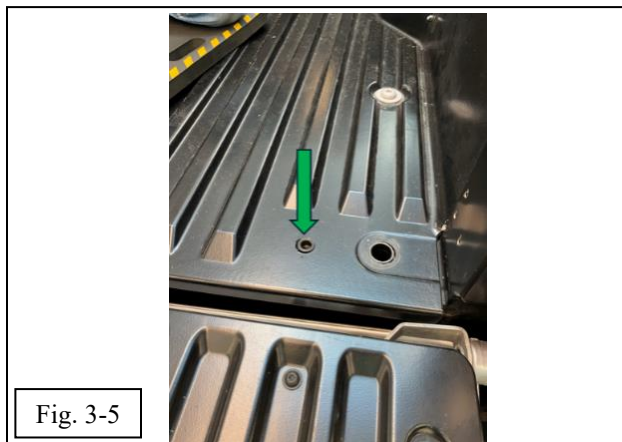


- (c) Hand start an M8x1.25x25 bolt (blue patch) with an M8x26x4 washer at 3 locations attaching the V-Brace to the Bed Side Rail using a T40 socket (Fig. 3-4).

NOTE: DO NOT torque fasteners. Leave them loose in order to follow the torque sequence in subsequent steps.

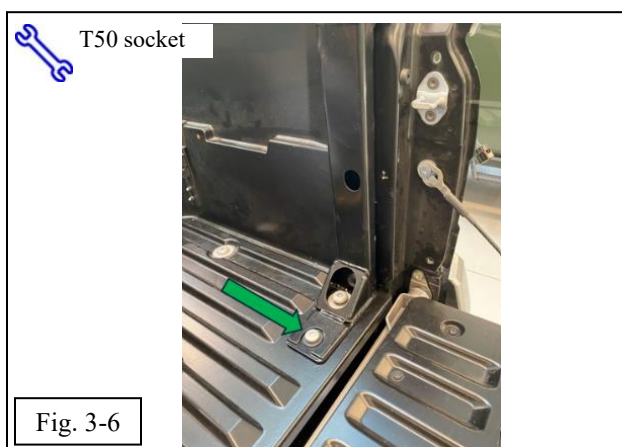
RH shown, repeat for LH side.

3 locations per side, total of 6 locations.



- (d) Install Collar into the location where the D-Ring Hook was previously removed (Fig. 3-5). This is the inboard hole at the rear of the bed.

NOTE: RH shown, repeat for LH side.

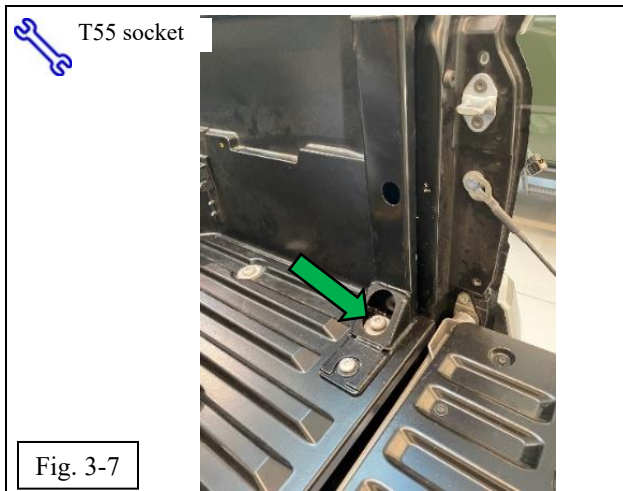


- (e) Set the L-Brace to the bed. Hand start SAE 7/16"-20 bolt with SAE washer through the L-Brace using a T50 socket (Fig. 3-6).

NOTE: DO NOT torque fastener. Leave it loose in order to follow the torque sequence in subsequent steps.

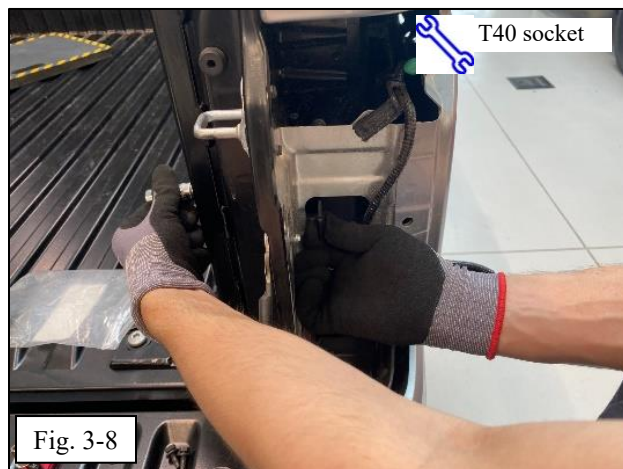
RH shown, repeat for LH side.

Be sure to verify alignment of the D-pillar holes at the top of the L-Brace prior to installing the bolt to verify the handed parts are on the correct side of the vehicle.



- (f) Hand-start the previously removed deck mount fastener through the L-Brace using a T55 socket (Fig. 3-7).

NOTE: RH shown, repeat for LH side.



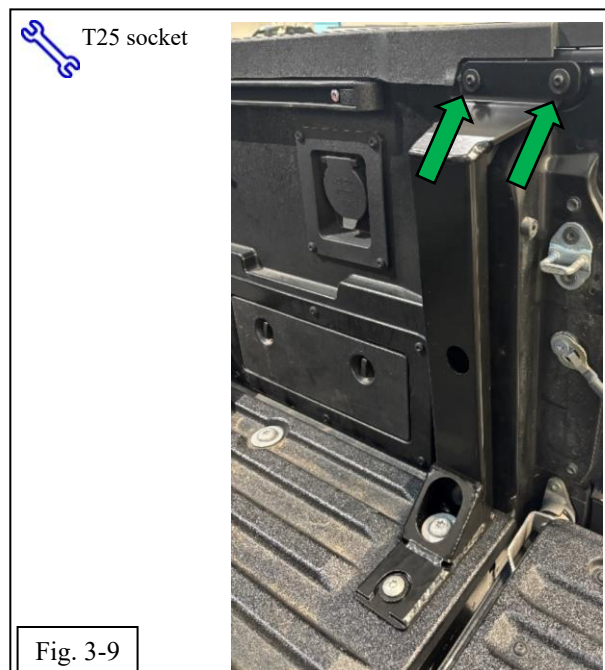
- (g) Hand-start M8x1.25x25 bolt (blue patch) with M8x19x2 washer into RCL Reinforcement using a T40 socket (Fig. 3-8).

NOTE: DO NOT torque fastener. Leave it loose in order to follow the torque sequence in subsequent steps.

Hold the RCL Reinforcement in one hand and turn the bolt with the other hand.

Once hand-started, let the RCL Reinforcement droop. The orientation will be finalized in a later step when part is torqued.

RH shown, repeat for LH side.



- (h) Hand-start M6x1.0x30 bolt (blue patch) with M6x18x3 washer through the L-Brace into the D-pillar at 2 locations per side using a T25 socket (Fig. 3-9).

NOTE: DO NOT torque fasteners. Leave them loose in order to follow the torque sequence in subsequent steps.

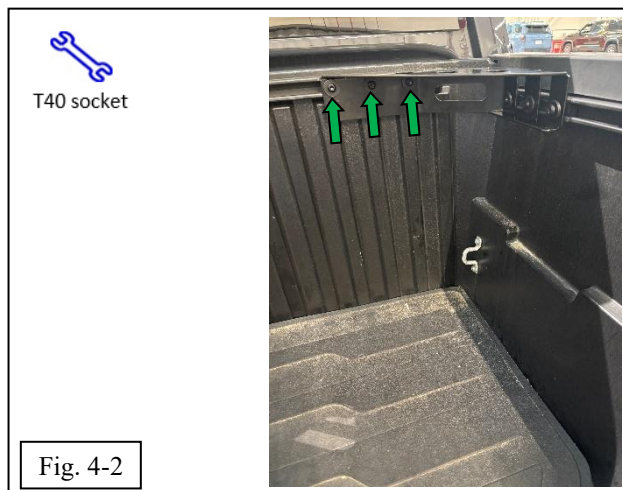
RH shown, repeat for LH side.



4. Torque Fasteners

- (a) Before torquing each V-Brace, push each V-Brace towards the front and outboard corner of the bed to ensure correct positioning (Fig. 4-1).

NOTE: RH shown, repeat for LH side.

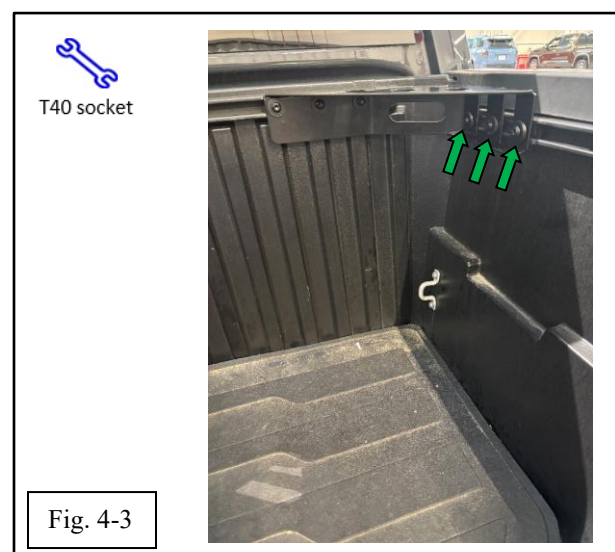


- (b) Tighten the bolts attaching the V-Brace to the Front Bed Rail using a T40 socket (Fig. 4-2).

Torque: 16 Nm (12 ft lb)

NOTE: RH shown, repeat for LH side.

3 bolts per side, total of 6 bolts.

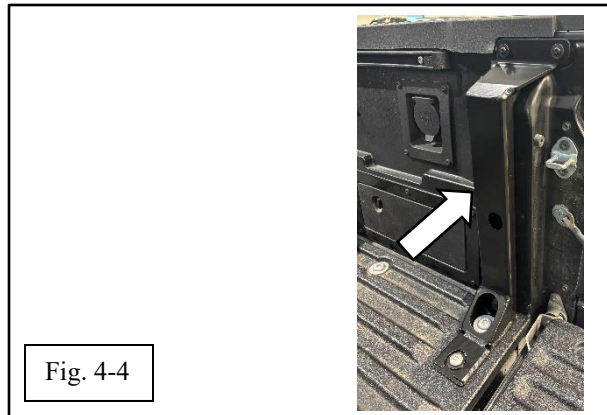


- (c) Tighten the bolts attaching the V-Brace to the Bed Side Rails using a T40 socket (Fig. 4-3).

Torque: 16 Nm (12 ft lb)

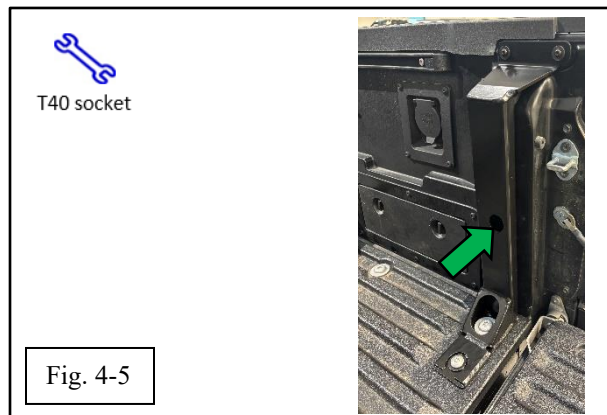
NOTE: RH shown, repeat for LH side.

3 bolts per side, total of 6 bolts.



(d) Before torquing the L-Brace, push the L-Brace outboard to the D-pillar to close any gaps (Fig. 4-4).

NOTE: RH shown, repeat for LH side.



(e) Torque the RCL Reinforcement using a T40 socket (Fig. 4-5).

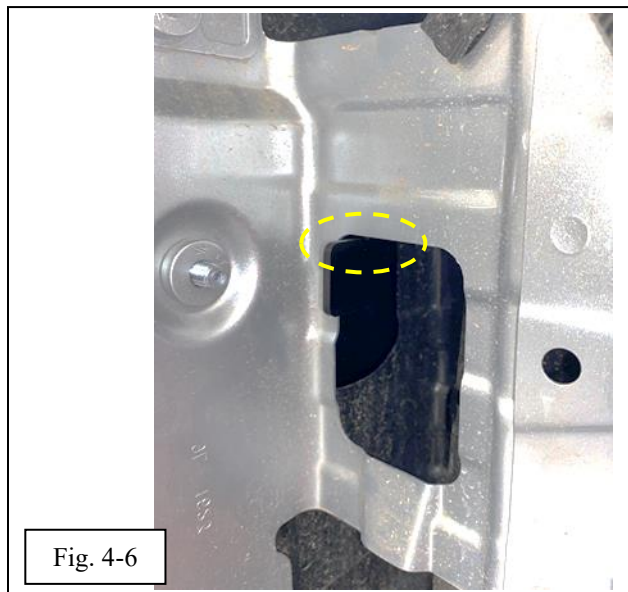
Torque: 22 Nm (16 ft lb)

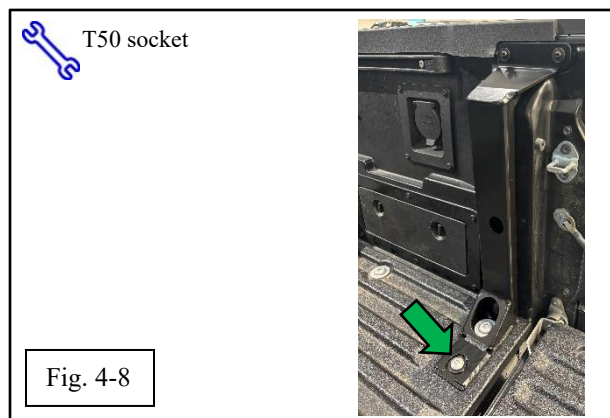
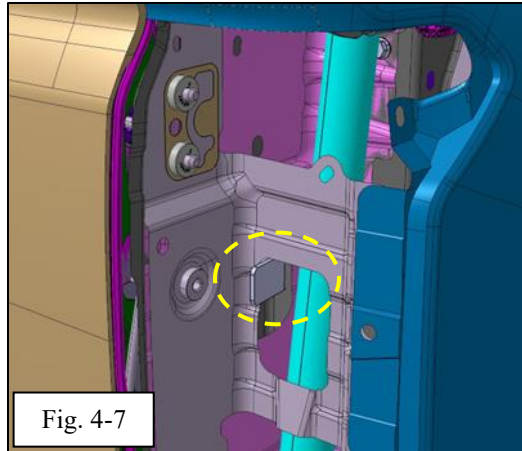
NOTE: RH shown, repeat for LH side.

⚠ Ensure that the RCL Reinforcement is properly oriented during torque application. The tab should be facing rearward.

⚠ There should be a 2-3mm gap between the RCL Reinforcement and the top edge of the cutout in the body. A gap must be present to ensure the RCL Reinforcement does not rub the body. This area is circled in yellow within Fig. 4-6.

⚠ The orientation of the RCL Reinforcement is critical for vehicles with automatic tailgate to maintain clearance to the actuator when the tailgate is closed (Fig. 4-7).

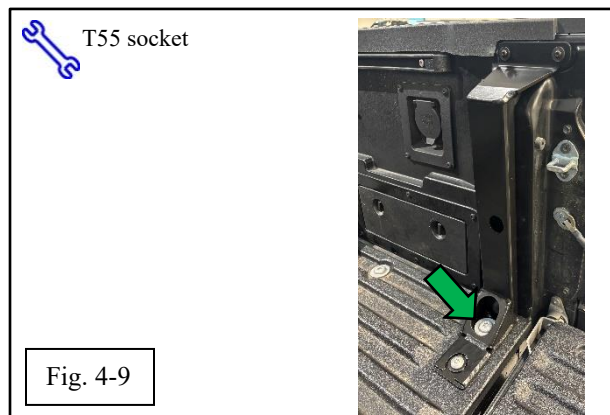




(f) Torque the L-Brace SAE Bolt using a T50 socket (Fig. 4-8).

Torque: 39 Nm (29 ft lb)

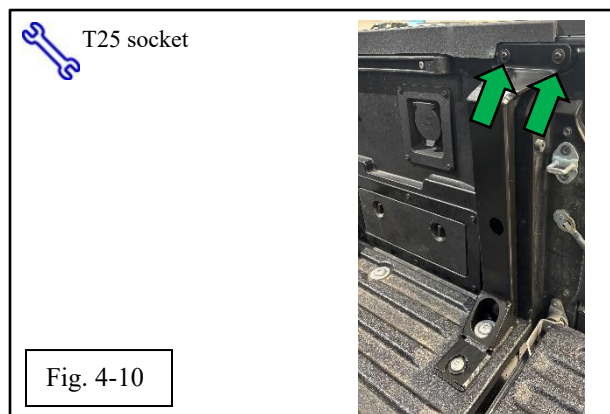
NOTE: RH shown, repeat for LH side.



(g) Torque the rearmost deck mount bolt using a T55 socket (Fig. 4-9).

Torque: 55 Nm (41 ft lb)

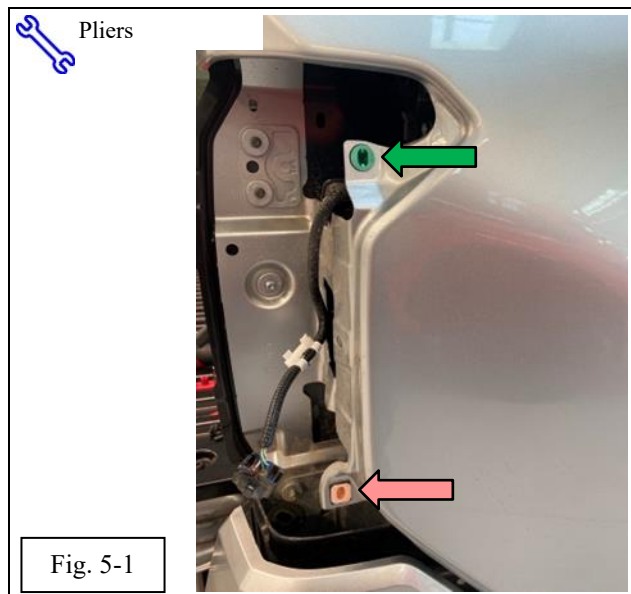
NOTE: RH shown, repeat for LH side.



(h) Torque the M6 fasteners on the D-pillar using a T25 socket (Fig. 4-10).

Torque: 9 Nm (80 in lb)

NOTE: RH shown, repeat for LH side.



5. Re-Assemble Vehicle

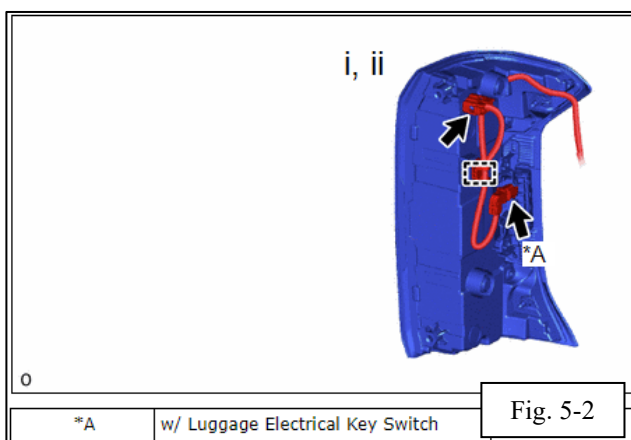
- (a) Remove the Rear Combination Lamp guides (clips) by squeezing the clips on the backside with a set of pliers (Fig. 5-1). Replace with the parts provided.



NOTE: These parts are non-reusable. Attempting to re-use previously installed parts may cause Rear Combination Lamp fitment issues.

The green part is installed in the upper location while the pink part is installed in the lower location.

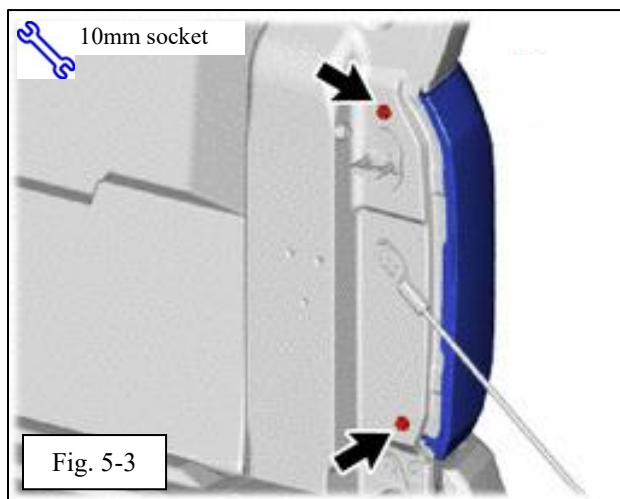
RH shown, repeat for LH side.



- (b) Re-install Rear Combination Lamps. Attach the wire harness clip and connectors (Fig. 5-2) before inserting Rear Combination Lamp into the guides attached to the body.

NOTE: Be sure to re-attach applicable wire harness connectors prior to attaching part to the vehicle. Vehicles with automatic tailgate will have a second connector for the switch integrated into the Rear Combination Lamp.

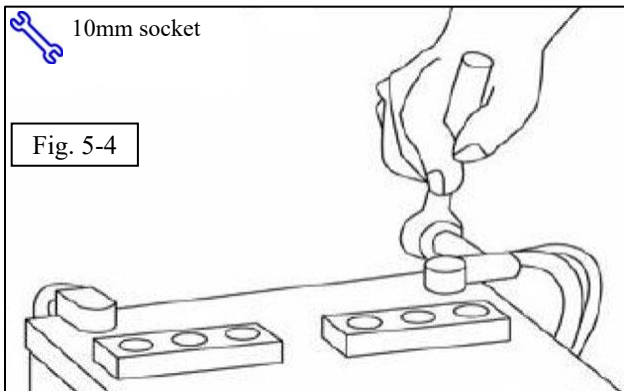
RH shown, repeat for LH side.



- (c) Install the previously removed fasteners to attach the Rear Combination Lamps to the D-pillar using a 10mm socket (Fig. 5-3).

Torque: 5 Nm (44 in lb)

NOTE: RH shown, repeat for LH side



(d) Reconnect the negative cable for 12V Battery using a 10mm socket (Fig. 5-4).



Torque: 5.4 Nm (48 in lb)




(e) For Hybrid vehicles, lower the rear seat bottom to its original position and install the 3 clips (Fig. 5-5).

(f) Remove vehicle protection.

TOYOTA TACOMA, HV 2024 - BED REINFORCEMENT KIT

Checklist - these points **MUST** be checked to ensure a quality installation.

<u>Check:</u>	<u>Look For:</u>
<u>Accessory Function Checks</u> <input type="checkbox"/> Verify parts:	Removed items have been discarded & replaced items are in place
<u>Vehicle Function Checks</u> <input type="checkbox"/> Rear Combination Lamp (RCL) <input type="checkbox"/> Power tailgate (if equipped)	 Confirm all functions of RCL (low-beam illumination, brake illumination, turn signal, emergency flasher, and reverse) Ensure power tailgate functions when using the button in the RCL
<u>Vehicle Appearance Check</u> <input type="checkbox"/> After accessory installation and removal of protective cover(s), perform a visual inspection.	Ensure no damage (including scuffs and scratches) was caused during the installation process. (For PPO installations, refer to TMS Accessory Quality Shipping Standard.)