

Part Number: PT413-42190 (Chrome), PT413-42191 (Black)

Kit Contents

Item #	Quantity Req.	Description
1	1	Fog Lamp, Left
2	1	Fog Lamp, Right
3		


Vehicle Service Parts (may be required for reassembly)


Item #	Quantity Req.	Description
1		
2		
3		


Hardware Bag Contents


Item #	Quantity Req.	Description
1		
2		
3		


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.

Additional Items Required For Installation

Item #	Quantity Req.	Description
1		
2		
3		

Conflicts

SR5, TRD models

Recommended Tools

Personal & Vehicle Protection	Notes
Special Tools	Notes
Installation Tools	Notes
#2 Phillips Screwdriver	3" long
10mm Socket	Standard length
1/4" drive extension	1-1/2"
1/4" drive ratchet	
Small Nylon Removal Tool	
Small "Stubby" Phillips Screwdriver	
Special Chemicals	Notes

General Applicability

MY19 and newer 4Runner Limited models only
--

Recommended Sequence of Application

Item #	Accessory
1	
2	
3	

*Mandatory

Procedure

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. Prepare the vehicle

-  (a) Protect the fender before starting.
-  (b) The engine components and coolant may be hot.
- (c) Check the kit for contents and any damage.
- (d) Remove the battery cable from the negative terminal (Fig. 1-1)

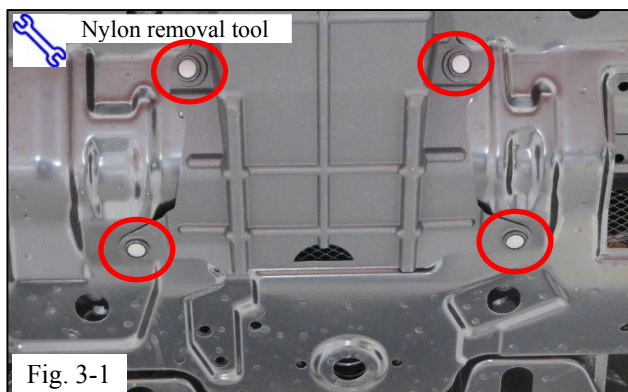
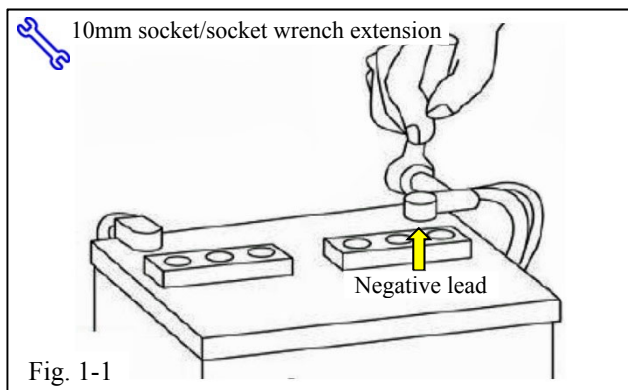
 **CAUTION:** Do not touch the positive terminal with any tool during removal.

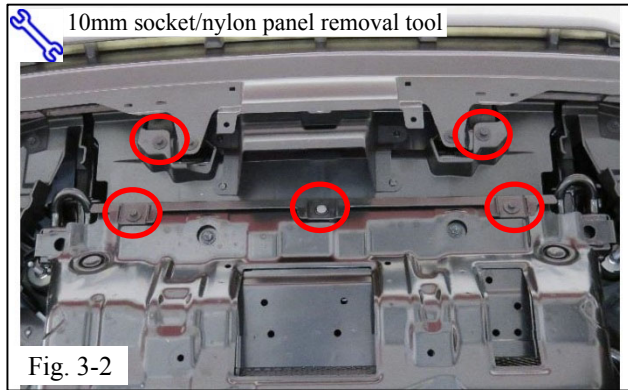
2. Place the Vehicle on Chassis Lift

- (a) Raise the vehicle to a comfortable working height.

3. Remove the Engine Under Cover

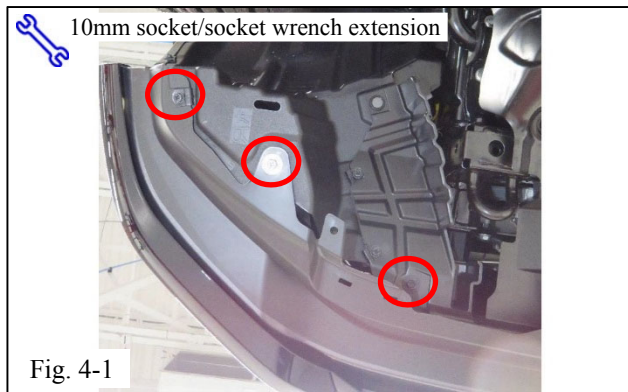
- (a) Remove the center duct by removing the (4) push fasteners (Fig. 3-1).
 - (1) The fasteners are removed by lifting (but not removing) the center pin with a nylon removal tool.





(b) Remove the engine under cover.

- (1) Remove the (4) screws and (1) push fastener and remove the cover (Fig. 3-2).



4. Partially Remove the Fender Liners

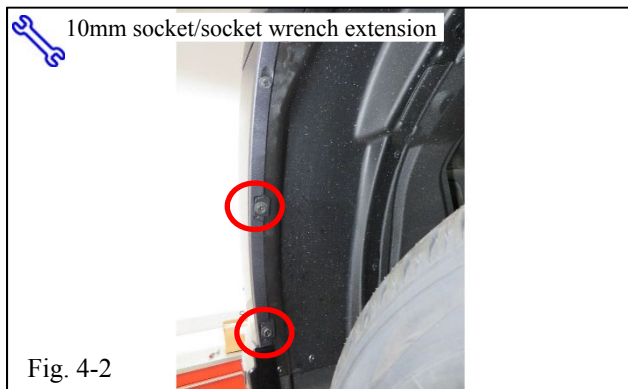
(a) Starting on either side of the vehicle, from under the bumper, remove the (3) screws (Fig. 4-1).



(1) The most inboard screw is recessed into the vehicle.



(b) Turn the wheel outward to gain additional clearance.



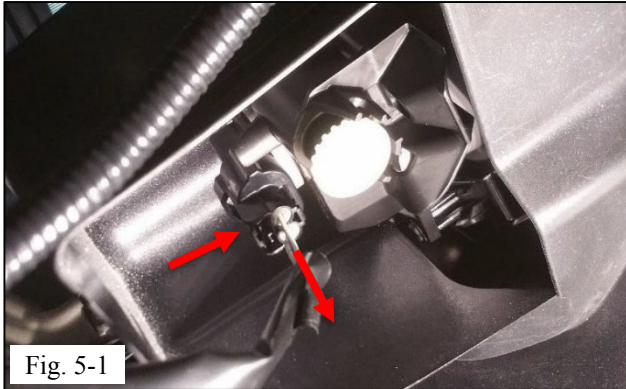
(c) From the wheel well, remove the (2) screws from the bumper as shown (Fig. 4-2).



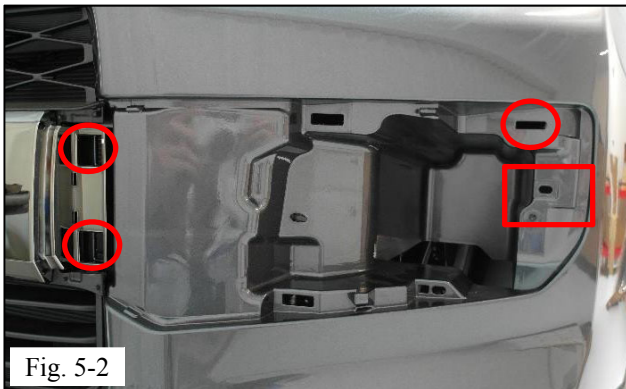
(d) Bend fender liner back to gain additional access for removal/installation of the bezel/lamp assembly.

5. Remove the Bezel/Lamp Assembly

- (a) Disconnect the bezel/lamp assembly from the vehicle wire harness by pressing on the release tab and pulling down (Fig. 5-1).

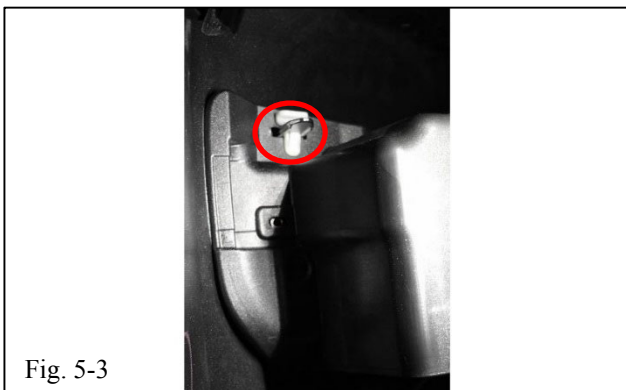


- (b) Location of “T-locks” (viewed from front of vehicle, bezel removed for clarity) (Fig. 5-2).
- (c) From behind the bumper, remove the (3) “T”-lock from the large mounting tabs by pressing on the release button and sliding out.



- (d) From behind using the Stubby Phillips Screw driver, remove the (1) screw from the bezel (boxed rectangle in Fig. 5-2).

- (1) (1) T-lock is located toward the side of the vehicle (Fig. 5-3).

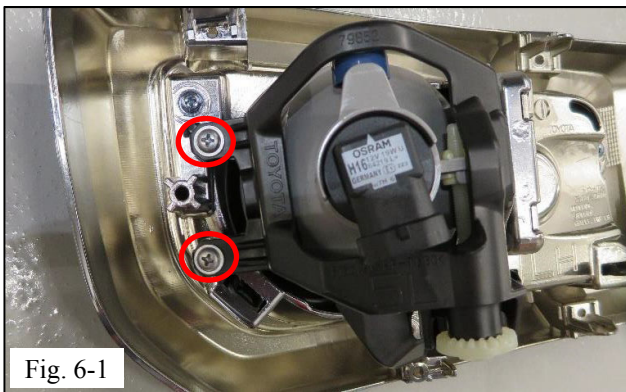




- (2) The (2) other T-locks are located towards the center of the vehicle (Fig. 5-4).
- (e) Release the remaining mounting tabs by pressing on the release buttons and pulling the bezel/lamp assembly forward.
 - (1) The bumper can be taped and a nylon removal tool used to assist in removal.
 - (2) Set Bezel on clean surface to protect it from any damage.

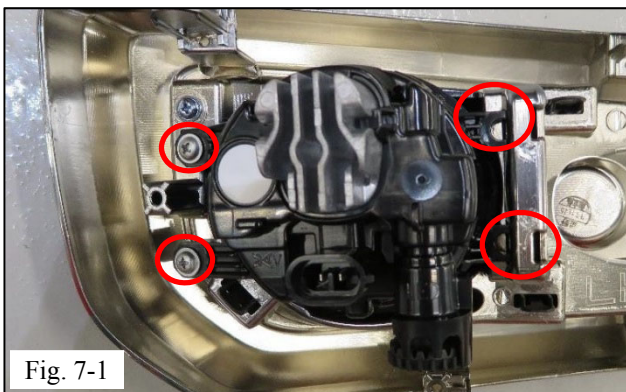
6. Remove the OE Fog Lamp from Bezel

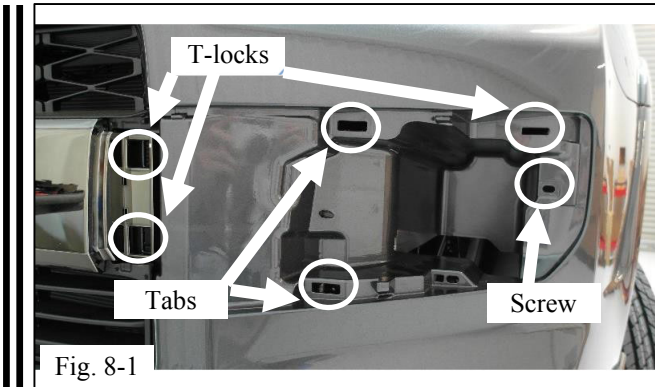
- (a) Using #2 Phillips screwdriver, remove the (2) mounting screws and save for reuse (Fig. 6-1).
- (b) Remove the OE fog lamp and discard.



7. Install the LED Fog Lamp to Bezel

- (a) Installation is the reverse of removing OE fog lamp.
 - (1) Insert the mounting tabs of the fog lamp into the mounting slots of the bezel as shown (Fig. 7-1)
 - (2) Secure with the (2) previously saved screws (Fig. 7-1).





8. Reinstall the Bezel/Lamp Assembly

- (a) Insert all the bezel/lamp assembly mounting tabs into the corresponding slots in the bumper and press to engage (Fig. 8-1).
- (b) Reinstall the (1) screw previously removed.
- (c) Reinstall the (3) previously saved T-locks.



- (d) Reconnect the fog lamp connector by inserting into the fog lamp and pressing forward (Fig. 8-2).

9. Reassemble the vehicle

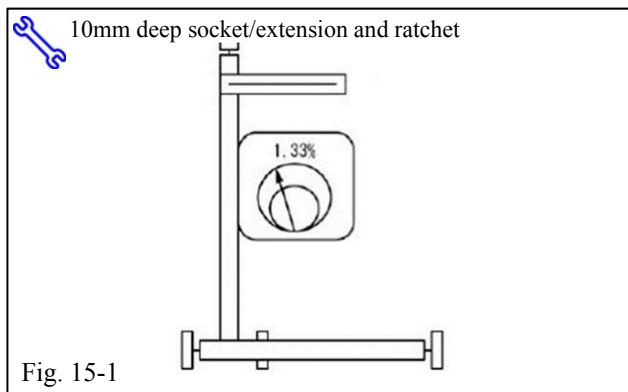
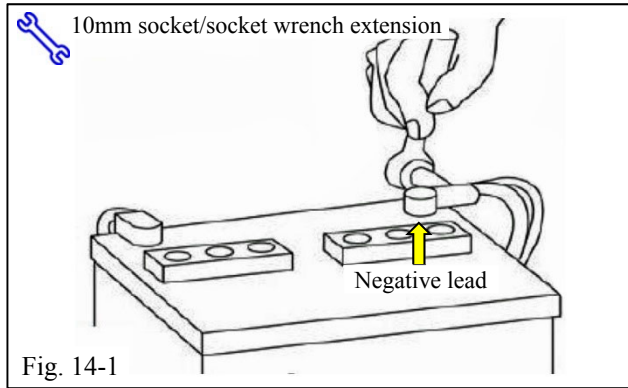
- (a) Bend the fender liner back into position.
 - (1) Reinstall the (2) previously removed fender liner bumper screws.
 - (2) Reinstall the (3) previously removed under bumper screws.

10. Install the Opposite Side Fog Lamp

- (a) Repeat Steps 4-9 on opposite side of vehicle.

11. Final Vehicle Reassembly.

- (a) Reinstall the engine under cover.
 - (1) Refasten with the (4) previously removed screws and (1) push fastener.
- (b) Reinstall the duct.
 - (1) Refasten with the (4) previously removed push fasteners.





12. Return the front wheels to straight.

13. Lower the vehicle.

14. Reconnect the Battery.


(a) Reconnect the negative (-) battery cable (Fig. 14-1).

 Torque: 5.4 N•m (48 in•lbs)

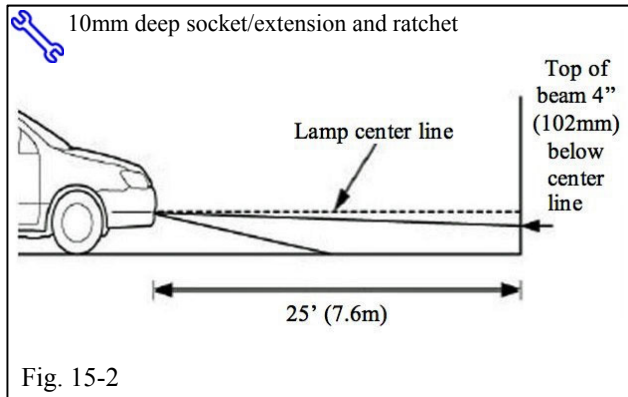
 **CAUTION:** Do not touch the positive terminal with any tool.

15. Aim the Fog Lights (DIO only).

(a) Align the Fog Light Beam.

 **NOTE:** If available, use a Hella Photometric Beam Setter (or equivalent) to align the fog light beam (Fig. 15-1).

(b) If a beam setter is not available, use a wall to aim the lights.



- (1) Position the vehicle on a flat surface at a distance of 25 feet (7.6m) from the fog light to a wall (Fig. 15-2).
 - (2) Measure the distance from the center of the lamp to the ground and mark off the same height on the wall. This is the fog light centerline (Fig. 15-2).
 - (3) Turn on the fog lights and adjust them so that the top of the beam (high intensity portion) falls 4 inches (102 mm) below the mark on the wall (the fog light centerline) (Fig. 15-2).
- (c) Use 10mm deep socket and 8" extension to turn the adjustment screw on the fog lights.

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

<u>Check:</u>	<u>Look For:</u>
<p><u>Accessory Function Checks</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> Install a short pin (if necessary) <input type="checkbox"/> Turn the headlights on <input type="checkbox"/> Check the fog light switch illumination <input type="checkbox"/> Turn the fog lights on <input type="checkbox"/> Switch the high beams on <input type="checkbox"/> Turn the headlights off <input type="checkbox"/> Check the fog light switch orientation 	<ul style="list-style-type: none"> Headlights function as normal Switch lights up Fog lights turn on High beams on/Fog lights off Headlights and fog lights turn off The lamp symbol faces left
<p><u>Vehicle Function Checks</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> Taillights/brake lights/turn signals <input type="checkbox"/> Reverse lights & emergency flashers <input type="checkbox"/> Mirror, dimmer controls, fuel door switch <input type="checkbox"/> Traction control <input type="checkbox"/> Hood release latch 	<ul style="list-style-type: none"> All function properly Function properly Function properly Functions properly Functions properly
<p><u>Vehicle Appearance Check</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> After accessory installation and removal of protective cover(s), perform a visual inspection. 	<p>Ensure no damage (including scuffs and scratches) was caused during the installation process.</p> <p>(For PPO installations, refer to TMS Accessory Quality Shipping Standard.)</p>