

**TOYOTA**

**TUNDRA**

**2014 -**

**SKID PLATE**

Preparation

**Part Number: PT938-34140**

**Kit Contents**

Item #	Quantity Reqd.	Description
1	1	Skid Plate
2	1	Hardware Bag
3		

**Hardware Bag Contents**

Item #	Quantity Reqd.	Description
1	2	M10 – Flange Nut
2	2	Angle Washer
3	3	Plastic Ratchet Fastener

**Additional Items Required For Installation**

Item #	Quantity Reqd.	Description
1		
2		
3		

**Conflicts**

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**Recommended Tools**

<b>Personal &amp; Vehicle Protection</b>	<b>Notes</b>
Safety Glasses	
<b>Special Tools</b>	<b>Notes</b>
<b>Installation Tools</b>	<b>Notes</b>
½” Ratchet	For 17mm Socket
3/8” Ratchet	
17mm Socket	
12mm Socket	
15mm Socket	
5mm Allen socket	
Torque wrench	Approx 10-90 ft/lb range
15mm Wrench	
Installation Fixture	PPO only
High Rise Jack Stand or similar support equipment	With wood block or padding.
<b>Special Chemicals</b>	<b>Notes</b>

**General Applicability**

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**Recommended Sequence of Application**


Item #	Accessory
1	Suspension Kit
2	Skid Plate
3	


\*Mandatory


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


Item #	Quantity Reqd.	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.

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.).

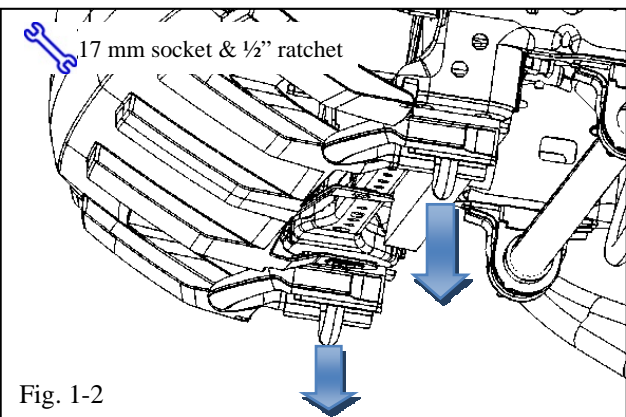
Please see your Toyota dealer for a copy of this document.

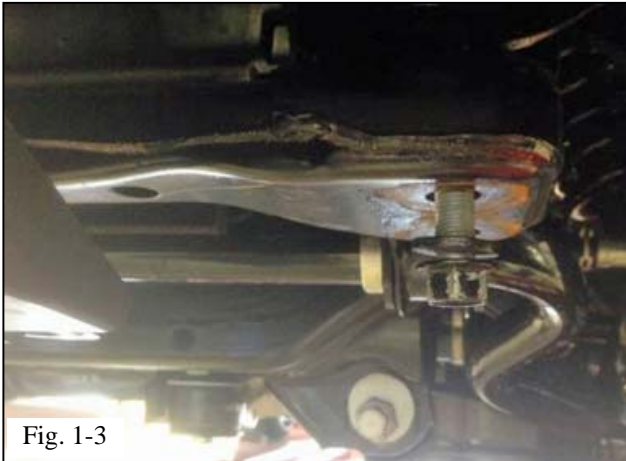
### 1. Prepare the Vehicle.

(a) Locate the front tow hooks (Fig. 1-1).



(b) Use a 1/2" ratchet and 17mm socket to remove the tow hooks. Save them for reinstallation (Fig.1-2).

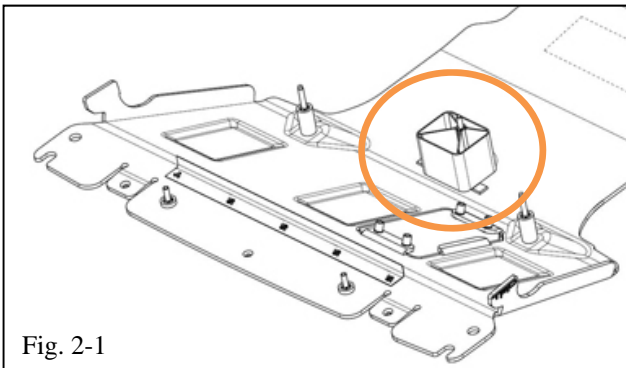




- (c) Temporarily install the front most tow hook bolts, leaving an approximately 1/2" gap between the bolt washer face and the underside of the frame (Fig. 1-3).

**2. Install the Skid Plate.**

- (a) Remove the skid plate from the packaging.



- (b) Review the center spacer position before raising the skid plate into place. The spacer should be in-between the two locators on the plate (Fig. 2-1).

**⚠ NOTE: The spacer must be positioned in-between the two locators on the plate as shown in Fig 2-1.**

**NOTE: It is recommended to use a high rise jack stand or other support aid during installation.**

- (c) Align the forward edge slots of the skid plate with the two tow hook fasteners that were partially threaded in Step 1(c).

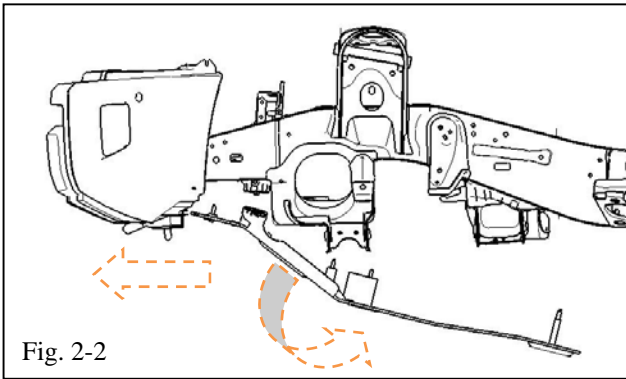


Fig. 2-2

- (d) Push the plate forward and rotate the rear section up, ensuring the rear fasteners go through the holes in the center member bottom and the top holes (Fig 2-2).

**⚠ CAUTION:** Ensure the bumper plastic tabs are on the outside of the skid plate (3 Places) (Fig 2-3).

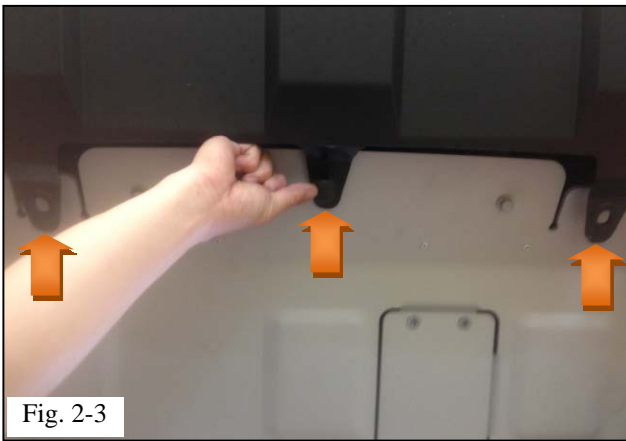


Fig. 2-3

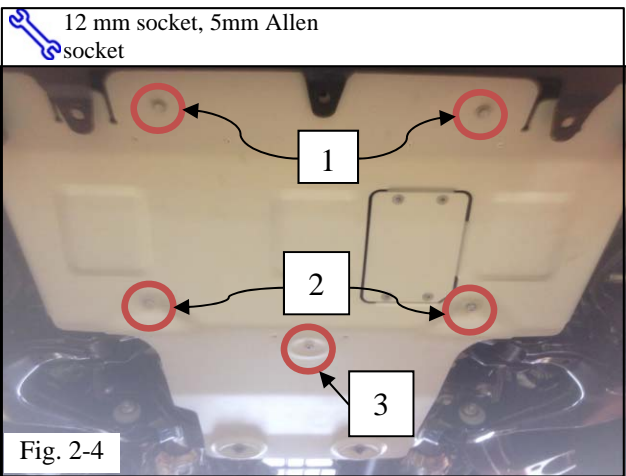


Fig. 2-4

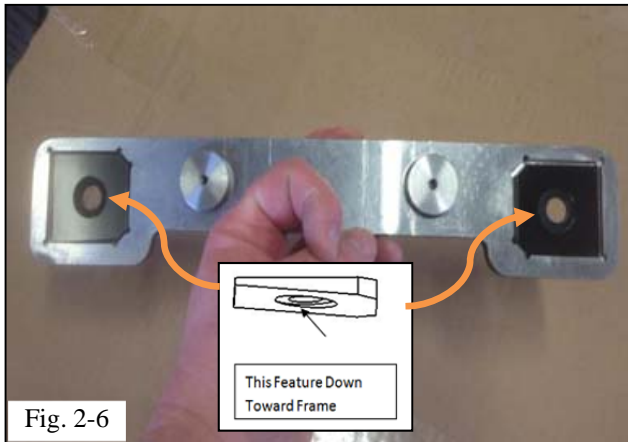
- (e) Hand tighten the front, middle and center fasteners in the order shown (Fig. 2-4).

**NOTE:** Use the appropriate sockets to start the thread engagement by hand.

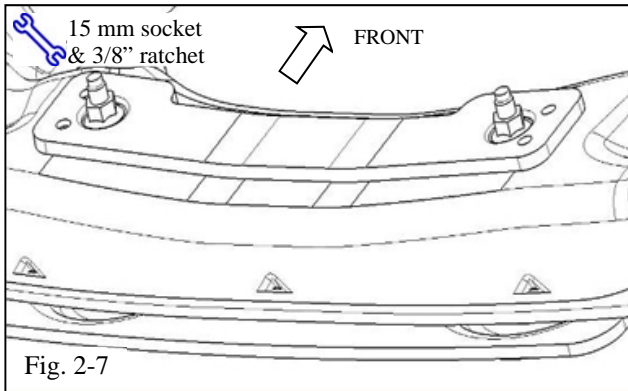


Fig. 2-5

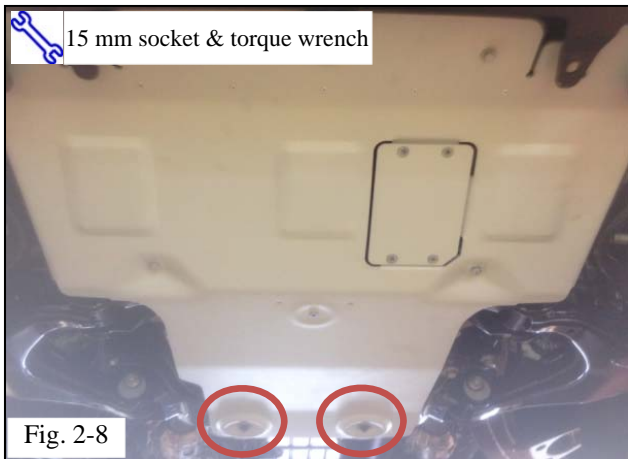
- (f) Locate the plastic ratchet fasteners and install them through the plastic bumper tabs into the holes on the skidplate (3 places) (Fig. 2-5).



- (g) Locate the angled washers and load them into the fixture (Fig. 2-6).
- (h) Place the fixture with angled washers over the skid plate's rear M10 bolts and line it up with the holes in cross member.



- (i) Ensure the fixture is seated on the cross member and install the 2 M10 nuts with a 15mm socket (Fig. 2-7).



- (j) Hold the bolt heads with a 15mm wrench and torque the M10 nuts to 38 ft-lbf (51 N-m) (Fig. 2-8).

**Torque: 38 ft-lbf (51 N-m)**



Fig. 2-9

(k) Remove the fixture from the vehicle. Check the angled washer orientation on the cross member to ensure the thickest side of the washer faces toward the center of the vehicle (Fig. 2-9).

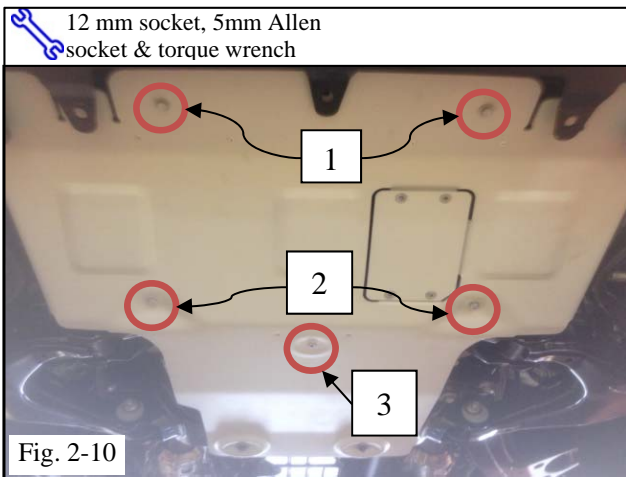


Fig. 2-10

- (l) Torque the other hardware to 21 ft-lbf (29 N-m):
- (1) Use a 12mm socket for Items 1 & 2 (Fig. 2-10).
  - (2) Use a 5mm Allen socket for Item 3 (Fig. 2-10).

**Torque: 21 ft-lbf (28 N-m)**

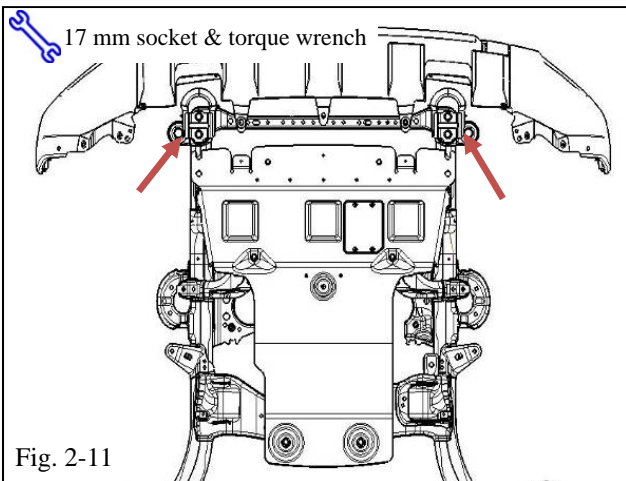


Fig. 2-11

(m) Reinstall the tow hooks and torque the tow hook bolts to 43 ft-lbf (59 N-m) (Fig. 2-11).

**Torque: 43 ft-lbf (58 N-m)**

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"><li><input type="checkbox"/> Visual alignment</li><li><input type="checkbox"/></li><li><input type="checkbox"/></li><li><input type="checkbox"/></li></ul>	<p>Ensure the plate is centered front &amp; back and side-to-side</p>
<p><u>Vehicle Function Checks</u></p> <ul style="list-style-type: none"><li><input type="checkbox"/></li><li><input type="checkbox"/></li><li><input type="checkbox"/></li></ul>	
<p><u>Vehicle Appearance Check</u></p> <ul style="list-style-type: none"><li><input type="checkbox"/> After accessory installation and removal of protective cover(s), perform a visual inspection.</li></ul>	<p>Ensure no damage (including scuffs and scratches) was caused during the installation process. (For PPO installations, refer to TMS Accessory Quality Shipping Standard.)</p>