

**Part Number: PT345-48140**

**Kit Contents**

Item #	Quantity Reqd.	Description
1	2	Front Mud guard
2	2	Rear Mud guard
3	1	Hardware bag

**Hardware Bag Contents**

Item #	Quantity Reqd.	Description
1	4	#10 x 17mm self-piercing screw
2	4	#10 nut spring

**Additional Items Required For Installation**

Item #	Quantity Reqd.	Description

**Conflicts**

None
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**Recommended Tools**

<b>Personal &amp; Vehicle Protection</b>	<b>Notes</b>
None	
<b>Special Tools</b>	<b>Notes</b>
None	
<b>Installation Tools</b>	<b>Notes</b>
Ratchet	1/4"
6" extension	1/4" drive
Hex Socket	10mm
Hex wrench	4mm
Nylon Pry Tool	
Lint Free Cloth	
<b>Special Chemicals</b>	<b>Notes</b>
Cleaner	VDC approved cleaner and cleaning method

**General Applicability**

2014 Highlander 2WD Gas and Hybrid vehicles

**Recommended Sequence of Application**


Item #	Accessory
1	Mudguards
2	Running Boards


\*Mandatory


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


Item #	Quantity Reqd.	Description


**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.

**Procedure**

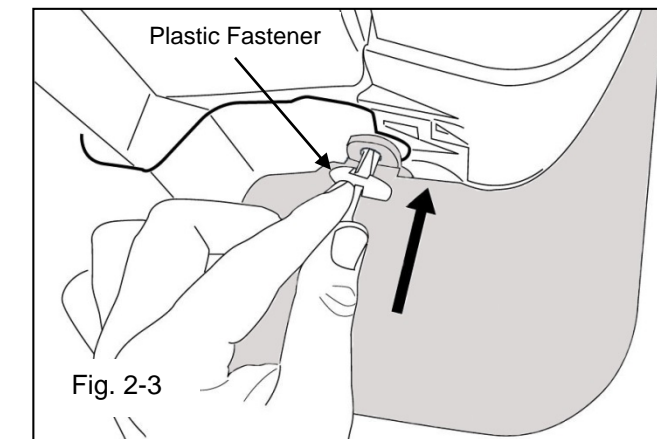
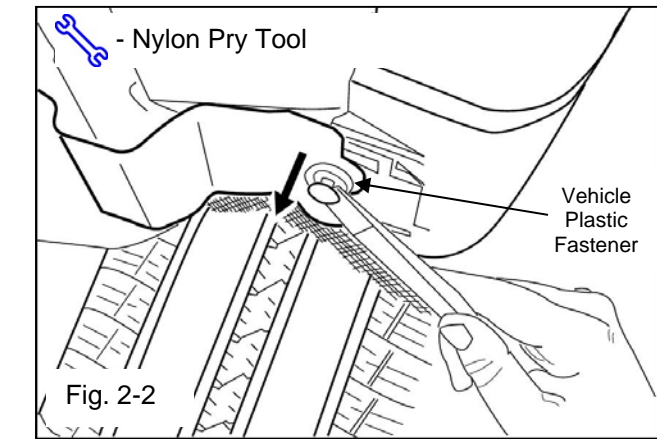
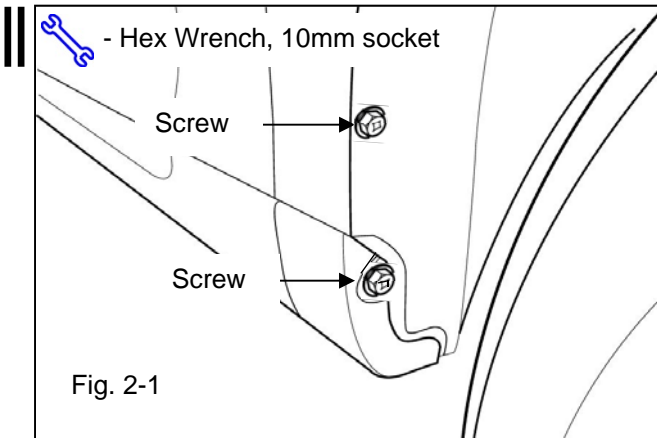
Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

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.

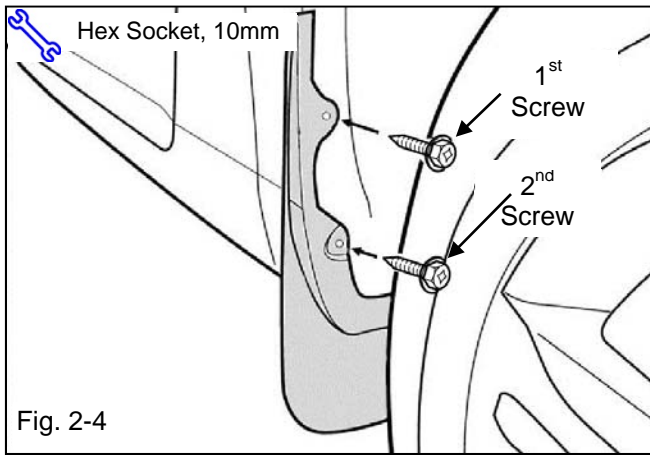


**1. Clean Mudguard Mounting Areas.**

- (a) Clean and degrease front and rear body panels where mudguard is to be located using VDC approved cleaner and cleaning method.

**2. Installation of Front Mudguard.**

- (a) Starting with the passenger side front wheel well, remove the two hex head screws and retain (Fig. 2-1).
- (b) Using the nylon pry tool, remove and retain the vehicle's bottom plastic fastener as shown (Fig. 2-2).
- (c) Position front mud guard in place and align the three mounting locations. Insert the vehicle's plastic fastener removed in Step 2b into the bottom mount location. Ensure fastener body is fully seated and depress center pin fully until it locks into place (Fig. 2-3).



(d) Using the two screws removed in step 2a, install the top screw first. Push mudguard tightly against fender and tighten. Then install the (2<sup>nd</sup>) lower screw. Push mudguard tightly against fender and tighten (Fig. 2-4).



**NOTE:** If necessary turn the steering wheel to make it easier to work inside the tire area.



(e) Fully tighten the screws so they will not become loose.

(f) Repeat above steps for driver side.

### 3. Installation of Rear Mudguard.

Starting with the passenger side, locate the two bolts shown behind the rear wheel as shown in Fig. 3-1.



(a) Remove and retain the bolts behind the rear wheel well (Fig. 3-1).

(b) Locate the dimples on the rear wheel well lip (Fig. 3-2).

Install the #10 nut springs over the three dimples on the rear wheel well lip (3 total).



**NOTE:** Make sure the dimple is at the center of the nut spring.

(c) Screw the #10 x 17mm screw(s) into the nut spring(s) ensuring the screws go through the dimples into the rear lip.




**NOTE:** Screws are designed to be self-tapping, but you may drill a small pilot hole if needed.


(d) Remove the screw(s) and retain.






(e) Position the rear mudguard in place and secure it with the two vehicle bolts removed in step 3 (a). Then install the three #10 screws (Fig. 3-3).

 **NOTE:** When tightening the screws/bolts, push the rear mudguard onto the quarter panel to reduce the gap between the rear mudguard and the panel.

 (f) Fully tighten all fasteners so they will not become loose.

(g) Repeat above steps for driver side.

#### 4. Final Check.

 (a) Check that the front and rear mudguards do not wobble.

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> <p><input type="checkbox"/> Front and rear mudguards.</p> <p><input type="checkbox"/> Gaps between mudguards and body side.</p>	<p>Check that they do not wobble.</p> <p>Check that part is firmly installed.</p> <p>Excessive gaps greater than 1.0 mm.</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.</p> <p>(For PPO installations, refer to TMS Accessory Quality Shipping Standard.)</p>