Preparation

**Part Number: PT278-35170** 

#### **Kit Contents**

Item#	Quantity Reqd.	Description
1	1	LH Base Rail Assembly w/
		Crossbar
2	1	RH Base Rail Assembly
3	1	Hardware Bag
4	2	Brackets
5	1	Front Crossbar Assembly

**Hardware Bag Contents** 

Item#	Quantity Reqd.	Description
1	4	M6 x 15.7mm Wafer Head
		Screws
2	6	M6 x 40mm Button Head
		Screws
3	1	Operator Caution Card
4	1	M6 Pivot Hinge Screw
5	10	Foam Washers
6	4	M6 x 19.7mm Button Head
		Screws
7	2	Load Label, 45kg, White Font

#### **Additional Items Required For Installation**

Item#	Quantity Reqd.	Description

#### Conflicts

None

#### **Recommended Tools**

Personal & Vehicle	Notes
Protection	
Safety Goggles	
Wrist & Belt Buckle	
Protectors	
Blankets	
Special Tools	Notes
<b>Installation Tools</b>	Notes
T25 & T30 Torx Driver	
(Hardened)	
Torque Wrench	13.5 N-m (119) lbf-in
Awl	
Nylon Panel Removal Tool	e.g. Panel Pry Tool #1 Toyota SST# 00002-06001-01
Extension	3"
X-Acto Knife,	
Deburing Tool or equivalent	
<b>Special Chemicals</b>	Notes
None	

#### **General Applicability**

All D-Cab Tacoma Models

## **Recommended Sequence of Application**

Item #	Accessory

\*Mandatory

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

		1
Item#	Quantity Reqd.	Description

## Legend



<u>STOP:</u> Damage to the vehicle may occur. Do not proceed until process has been complied with.



**OPERATOR SAFETY:** Use caution to avoid risk of injury.



<u>CAUTION:</u> 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.



<u>TOOLS & EQUIPMENT:</u> 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.

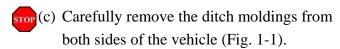
This document covers such items as:-

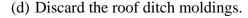
- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.).
- Safety (eye protection, rechecking torque procedure, etc.).
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.).
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.).

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

## 1. Remove the Ditch Moldings.

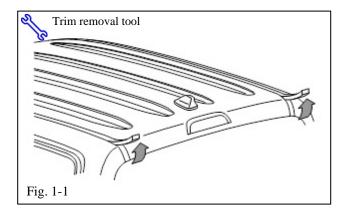
- (a) Pull back the wrap guard about 10" from each side and cut off the excess (if applicable).
- (b) Add vehicle protection to the top of the doors and down the side of the vehicle.

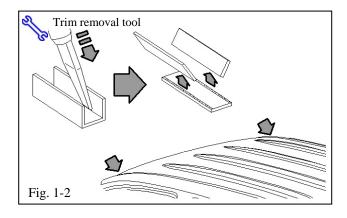




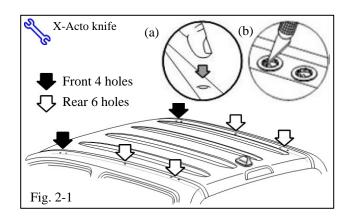


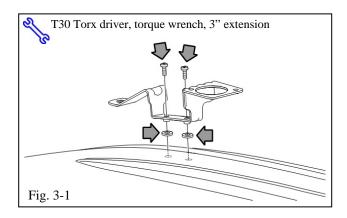
(e) Carefully remove any remaining tape residue at the rear of the ditch above the rear window.

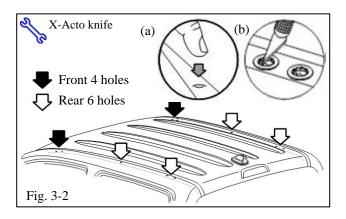




- (f) Use a trim removal tool to break off the vertical walls of the front ditch clips (RH & LH) (Fig. 1-2).
  - (1) Wedge the trim removal tool in from the outside.
  - (2) Once the removal tool is in place, give it a sharp blow with your hand.
  - (3) The sharp blow should cause the wall to break.
  - (4) Repeat for both sides (Fig. 1-2).







## 2. Prepare the Roof for Rack Installation.

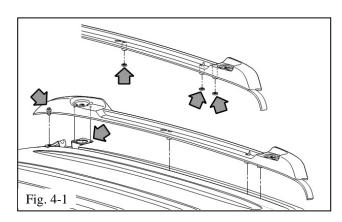
- (a) Use a finger to locate the tape that covers the 10 weld nuts (5 LH & 5 RH) and press down to create a dimple at each location (Fig. 2-1).
- (b) Use an X-Acto knife or deburring tool to carefully remove all seal material in the front 4 holes only (2 RH & 2LH) to expose the weld nut. Ensure no seal material is in the cavity near the threads (Fig. 2-1).

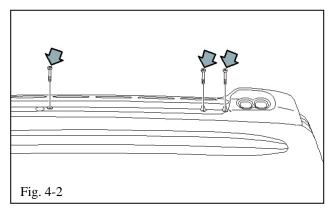
# 3. Install the RH & LH Side Roof Rack Brackets.

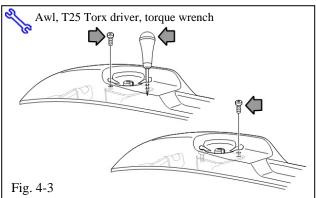
- (a) Remove the adhesive backing & install washers on the bottom of the bracket holes (Fig. 3-1).
- (b) Install the bracket (Fig. 3-1).
- (c) Install two M6 x 19.7mm short button head screws (with the pink thread lock) and tighten them to 13.5 N.m (119 lbf-in) (Fig. 3-1).

## **S**Torque: 13.5 N-m (119 lbf-in)

(d) Use an X-Acto knife or deburring tool to carefully remove all seal material in the 6 rear holes only (3 RH & 3 LH) to expose the weld nut. Ensure no seal material is in the cavity near the threads (Fig. 3-2).







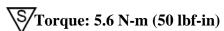
#### 4. Install the RH Side Roof Rack.

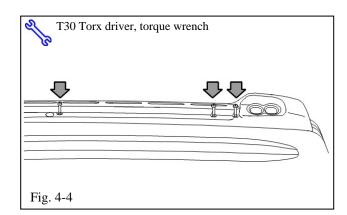
NOTE: The RH side roof rack does not have the crossbar pre-assembled.

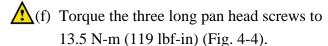
- (a) Remove the adhesive backing and install 3 washers onto the bottom surface mounting posts, then place it on the roof (Fig. 4-1).
- (b) Align the assembly so that the pad nose fits into the ditch and is snug against the front window lace (Fig. 4-1).
- (c) Visually align the yellow clip at the front above the hole in the bracket. Use the palm of your hand and strike it firmly to seat it in place (Fig. 4-1).
- (d) Hand start the three long pan head screws (with the green thread lock) into the roof rack along the roof ditch (Fig. 4-2).

**NOTE:** Do not tighten them at this time.

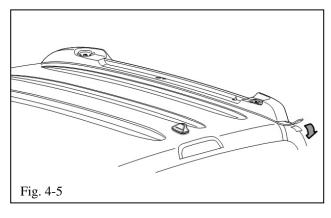
- (e) Use an awl to center the bracket hole below the access hole in the roof rail (Fig. 4-3).
  - (1) Install the first M6 x 15.7 mm wafer head screw (with the blue thread lock) and tighten it to ensure that the part does not move when the awl is removed.
  - (2) Install the second wafer head screw and tighten it.
  - (3) Torque the two short wafer head screws to 5.6 N-m (50 lbf-in).



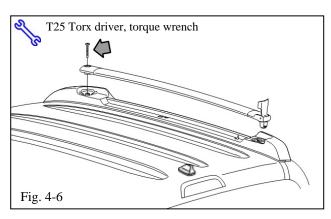




**S/Torque: 13.5 N-m (119 lbf-in)** 



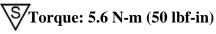
(g) Align the stub on the rear of the pad with the roof ditch. Once aligned, remove the tape backing and press down firmly. Tuck the stub under the rear window lace (Fig. 4-5).



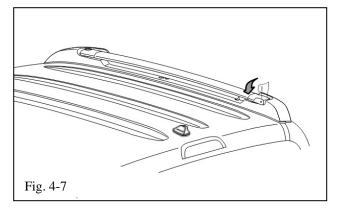
(h) Install the crossbar assembly to the roof rack (Fig. 4-6).



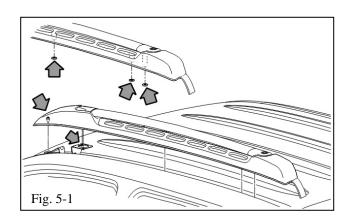
(i) Install the Torx head pivot bolt and torque it to 5.6 N-m (50 lbf-in) (Fig. 4-6).

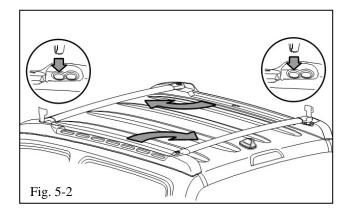


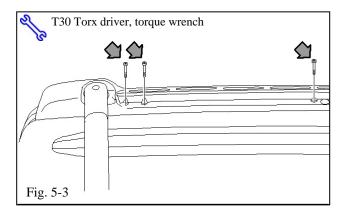
CAUTION: Be careful NOT to apply too much downward force while torqueing the screw as you may push the tap plate out of the holder in the rail below (Fig. 4-6).



(i) Ensure the crossbar is secure by lowering the lever (Fig. 4-7).







#### 5. Install the LH Side Roof Rack.

NOTE: The LH side roof rack does have the crossbar pre-assembled.

- (a) Remove the adhesive backing and install 3 washers onto the bottom surface mounting posts, then place it on the roof (Fig. 5-1).
- (b) Align the assembly so that the pad nose fits into the ditch and snug against the front window lace (Fig. 5-1).
- (c) Visually align the yellow clip at the front above the hole in the bracket. Use the palm of your hand and strike it firmly to seat it in place (Fig. 5-1).
- (d) Lift the LH & RH crossbar levers into the open position and rotate the crossbars so they rest on the base rails. Do not latch them at this time (Fig. 5-2).

(e) Hand start the three long pan head screws (with the green thread lock) into the roof rack along the roof ditch (Fig. 5-3).



**NOTE:** Do not tighten them at this time.

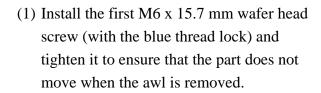
(f) Rotate the crossbar from the LH front rail to access the front screw holes.

Fig. 5-4

Awl, T25 Torx driver, torque wrench



(g) Use an awl to center the bracket hole below the access hole in the roof rail.



- (2) Install the second wafer head screw and tighten it.
- (3) Torque the two short wafer head screws to 5.6 N-m (50 lbf-in) (Fig. 5-4).



Torque: 5.6 N-m (50 lbf-in)



(h) Torque the three long pan head screws into the roof rack along roof ditch to 13.5 N-m (119 lbf-in) (Fig. 5-3).



**S/**Torque: 13.5 N-m (119 lbf-in)



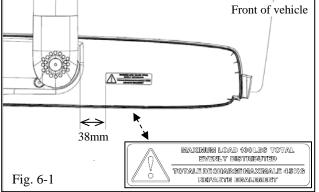


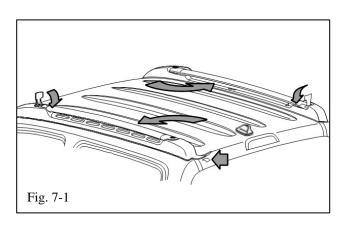
(a) Carefully open the hardware bag and remove the load labels from the hardware bag (Fig. 6-1).



**NOTE:** The maximum load indicated on the label is 100 lb (45kg).

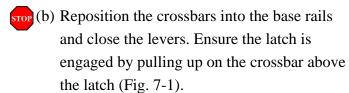
- (b) Remove one of the load labels from the protective backing.
- (c) Orient the load label so that the text is legible.
- (d) Place the label on the top, center of the roof rail, 38mm (1.5 inches) from the cross-bar side. Firmly apply the load label by applying pressure from one end of the load label to the opposite end of the load label.
- (e) Repeat Step 6(b) through Step 6(d) on the opposite rail.





## 7. Finish the Roof Rack Assembly.

(a) Align the stub on the rear of the pad with the roof ditch. Once aligned, remove the tape backing and press down firmly. Tuck the stub under the rear window lace (Fig. 7-1).



## 8. Finish the installation.

(a) Place the owner's manual in the vehicle's glove box.

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

Check:	Look For:		
Accessory Function Checks			
Ensure the crossbars will install and lock into the deployed (cross-car) position	Crossbars to lock into the deployed (crosscar) position securely		
Crossbars should be securely locked into base rails (stowed) for shipment	Crossbars securely locked into base rails (stowed)  Not greater than 1.5 mm		
Gap between roof rack side rail pads and vehicle roof surface			
Load Label	Ensure the load labels are installed on the rail and legible (both sides).  Maximum load indicated on the label is 100 lbs (45 kg)		
Valida Eurotian Chadra			
<u>Vehicle Function Checks</u>			
None Required			
Vehicle Appearance Check			
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.		