

Part Number: PT278-89170

Kit Contents

Item #	Quantity Req.	Description
1	1	Front Crossbar Assembly
2	1	Rear Crossbar Assembly
3	1	Hardware Bag

Hardware Bag Contents

Item #	Quantity Req.	Description
1	2	Rubber Stopper
2	4	M6 Wafer Head Screw
3	2	Load Label, 60kg
4	1	User Manual

Additional Items Required For Installation

Item #	Quantity Req.	Description
1		
2		
3		

Conflicts

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Recommended Tools

Personal & Vehicle Protection	Notes
Safety Goggles	
Blankets	
Wrist & Belt Buckle Protectors	
Special Tools	Notes
Installation Tools	Notes
Nylon Panel Removal Tool	
T30 Torx Head Screwdriver	
T30 Torx Head Socket	
Torque Wrench	
Tape Measure	
Special Chemicals	Notes

General Applicability

All Base and Limited Models with Side Rails

Recommended Sequence of Application







Item #	Accessory
1	
2	
3	

*Mandatory

Vehicle Service Parts (may be required for reassembly)

Item #	Quantity Req.	Description
1	1	User Manual P/N: PT278-89170-AAS
2	2	Thumbscrew P/N: PT278-89150-TS
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.

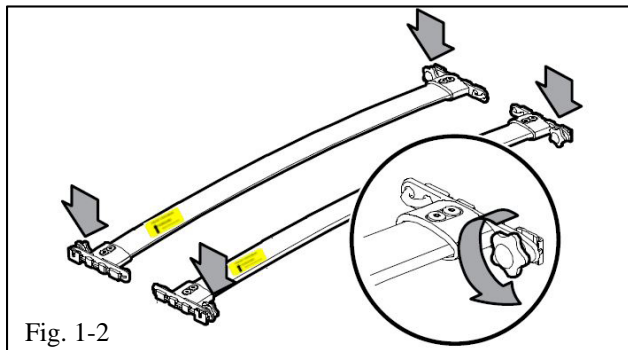
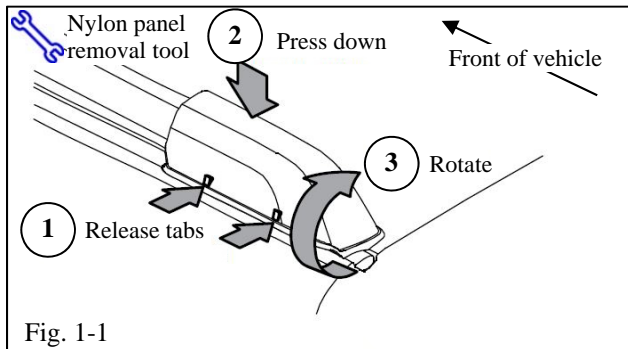
Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

These guidelines can be found in the "Accessory Installation Practices" document.

This document covers such items as:-

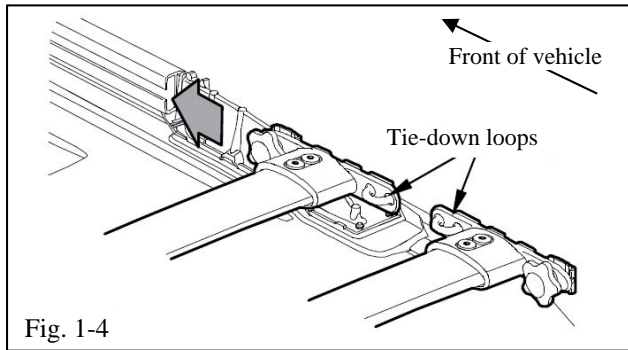
- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.).
- Safety (eye protection, rechecking torque procedure, etc.).
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.).
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.).

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



1. Install the Cross Bar.

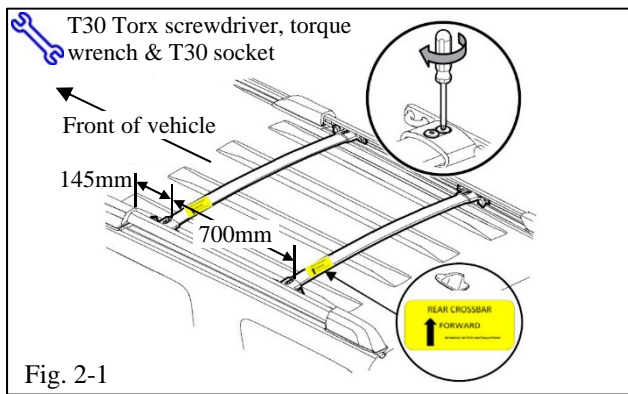
- Carefully remove the rear rail covers (Fig. 1-1).
 - Use a nylon panel removal tool to pry the cover outward at the tabs.
 - Press down on the inward side and rotate the cover.
 - Keep the covers for reinstallation.
- Loosen the knobs (4x) on each cross bar joint (Fig. 1-2).
- Remove the shipping tape located on top of the wafer head screws (4x) (Fig. 1-3).



- (d) Slide the cross bars into the rails with the tie-down loops toward the center of the vehicle (Fig. 1-4).

⚠ NOTE: The cross bar ends are labeled LF (left front), RF (right front), LR (left rear) and RR (right rear) for reference.

2. Position the Cross Bars.

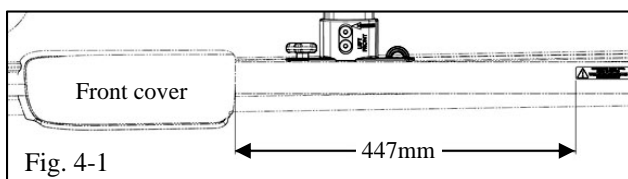
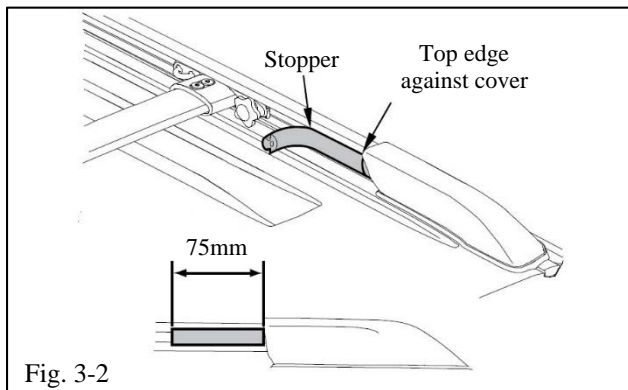
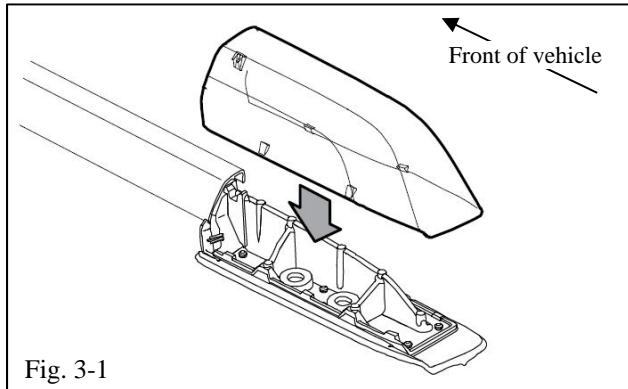


- (a) Position the front and rear cross bars so they are parallel.
- (b) Place the front cross bar 145mm (5.7 inches) from the back of the front cover to the cross bar center (Fig. 2-1).
- (c) Place the rear cross bar 700mm (27.6 inches) from the front cross bar center to the rear cross bar center (Fig. 2-1).
- (d) Securely tighten the knobs.

⚠ (e) Tighten the LH and RH side M6 wafer head screws to 1.7 N-m (15 in-lbf).


Torque: 1.7 N-m (15 in-lbf)


⚠ (f) Remove and discard the front and rear yellow cross bar position labels (Fig. 2-1).



3. Install the Rear Covers & Stoppers.

- (a) Replace the rear covers removed in Step 1(a) (Fig. 3-1).

-  (1) Align the rear cover clips with the slots on the base rail.
- (2) Press down until the cover snaps into position.


 **NOTE: Confirm the covers are installed securely.**

- (b) Carefully open the hardware bag and remove Stoppers from the hardware bag.
- (c) Press the stopper into the groove of the side rail on both sides of the vehicle (Fig. 3-2).

4. Install the Load Labels.

- (a) Remove a load label from the hardware bag.
- (b) Remove the load label protective backing.
- (c) Orient the load label so that the text is legible.
- (d) Place it on the top, center of the roof rail, 447mm (17.6 inches) from the front cover (Fig. 4-1).
- (e) Apply pressure from one end of the load label to the opposite end to firmly secure the load label.
- (f) Repeat Step 4 on the other side.

5. Complete the Installation.

-  (a) Place the hardware bag with the user manual in the glove compartment.

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"/> Cross bars are secure & in correct position <input type="checkbox"/> Cross bars are not bound<input type="checkbox"/> Rear covers securely attached<input type="checkbox"/> Hardware bag with user manual	<p>Knobs are tight, front cross bar center at 145mm (5.7”) from front cover & 700mm (27.6”) between cross bar centers</p> <p>Cross bars slide freely</p> <p>Cover clips are fully engaged</p> <p>Stored in the glove compartment</p>
<p><u>Vehicle Function Checks</u></p> <ul style="list-style-type: none"><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/>	
<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. (For PPO installations, refer to TMS Accessory Quality Shipping Standard.)</p>