

Part Number: PT278-42150

Kit Contents

Item #	Quantity Req.	Description
1	1	Crossbar Assembly Front (long)
2	1	Crossbar Assembly Rear (short)
3	1	Hardware Bag

Hardware Bag Contents

Item #	Quantity Req.	Description
1	1	Key
2	2	Forward Limit Label w/ Black Lettering
3	2	Forward Limit Label w/ White Lettering
4	1	Installation Instructions
5	2	Load Capacity Label w/ Black Lettering (100 lb / 45 kg)
6	2	Load Capacity Label w/ White Lettering (100 lb / 45 kg)

Additional Items Required For Installation

Item #	Quantity Req.	Description
1		
2		
3		

Conflicts

None

Recommended Tools

Personal & Vehicle Protection	Notes
Safety Glasses	
Safety Gloves	
Cloth	
Wrist & Belt Buckle Protection	
Special Tools	Notes
Installation Tools	Notes
Tape Measure (Metric)	
Non-Intrusive Infrared Temp Probe/Gun	
Heat Gun	
Special Chemicals	Notes
Cleaner	Approved Cleaner

General Applicability

All 2013 and newer RAV4 models

Recommended Sequence of Application







Item #	Accessory
1	
2	
3	

*Mandatory

Vehicle Service Parts (may be required for reassembly)

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.

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. Affix the Front Crossbar “Forward Limit” and “Load Limit” Warning Labels to the Side Rails.


 (a) The side rail surface temperature must be between 60°F and 110°F.

(b) Clean the area on the front LH side rail.

(c) Place a “Forward Limit” label.

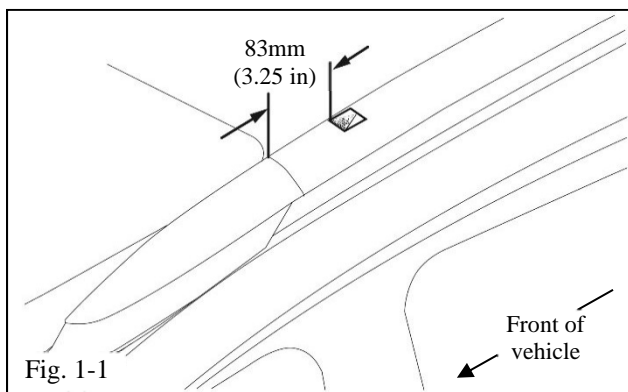
 (1) Select a forward limit label with font color contrasting to the rail, so that the label is legible (e.g., select a label with black font for use with a silver rail).

 (2) Use a ruler to measure 83mm (3.25 in.) back from the front of the side rail.

 (3) Remove the adhesive backing from a forward limit label and position it so that the triangle on the label is pointing to the rear of the vehicle.

(4) Place the label 83mm to the rear of the vehicle from the back of the front rail cover (2 places) (Fig. 1-1).

(5) Discard the two unused forward limit labels.



(d) Place a “Load Limit” label.

! (1) Select a load limit label with font color contrasting to the rail, so that the label is legible (e.g., select a label with black font for use with a silver rail).

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

(2) Remove one of the load limit labels from protective backing.

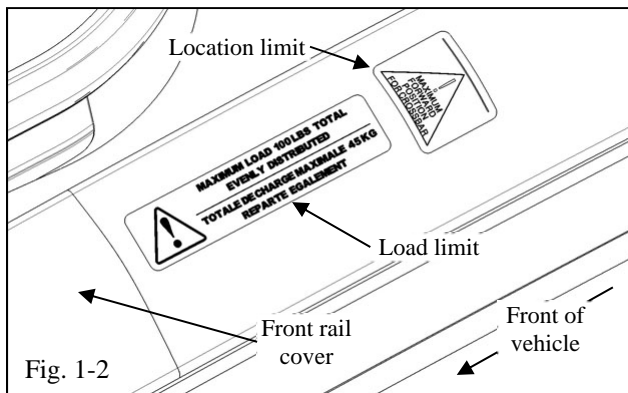
(3) Orient the label so that the text is legible.

(4) Place the label between the forward limit label and the front rail cover (Fig. 1-2).

(5) Firmly apply the load limit label by applying pressure from one end of the label to the opposite end of the label.

(e) Repeat Step 1 on the RH side.

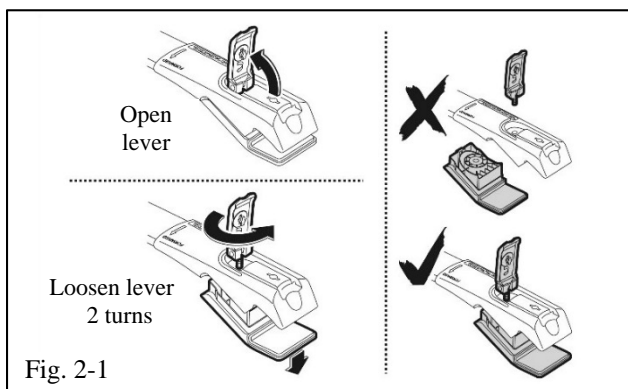
(f) Discard the two unused load labels.

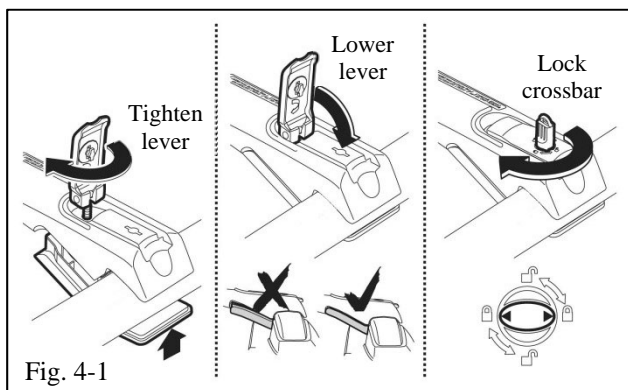
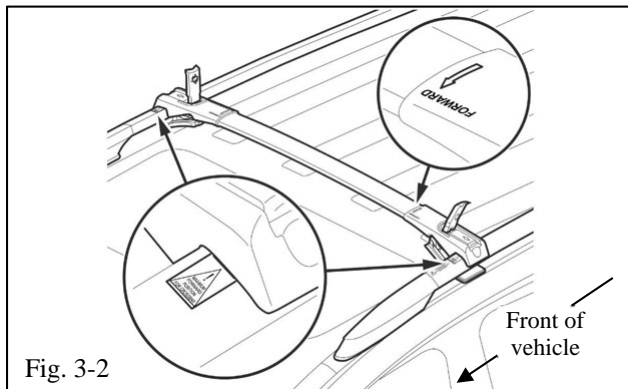
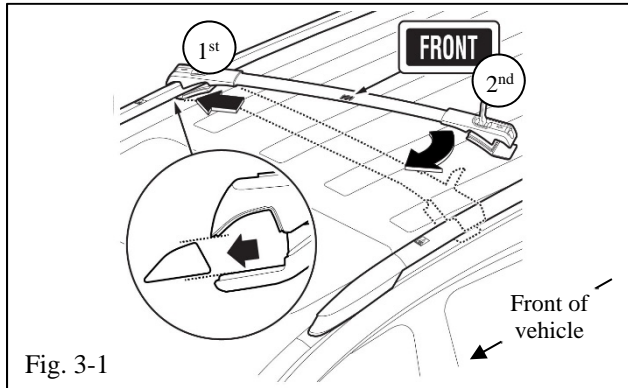


2. Prepare the Front and Rear Crossbars.

(a) Open the crossbar levers (Fig. 2-1).

! (b) Loosen the levers 2 turns counterclockwise, lowering the clamp. **DO NOT DISENGAGE THE CLAMPS FROM THE SUPPORTS** (Fig. 2-1).





3. Install the Front Crossbar.

- (a) The front crossbar has a “FRONT” sticker on the center of the bar (Fig. 3-1).
- (b) Install the front crossbar at an angle parallel with the roof surface (Fig. 3-1).
 - (1) Slide the 1st support over the side rail.
 - (2) Rotate the 2nd support forward over the side rail.

⚠ NOTE: Make sure the clamp is open enough to clear the side rail. DO NOT FORCE IT ONTO THE SIDE RAIL.

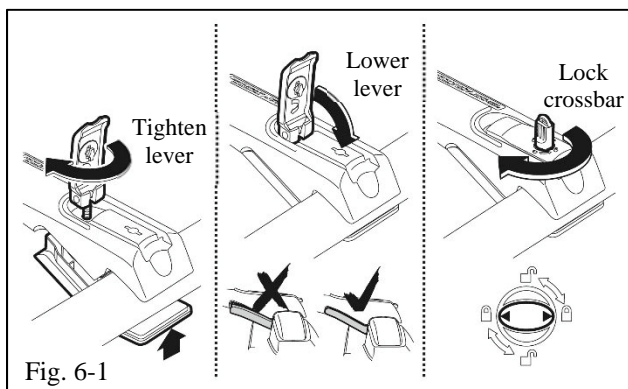
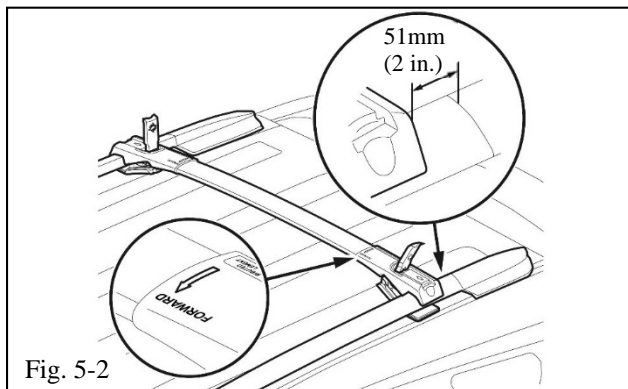
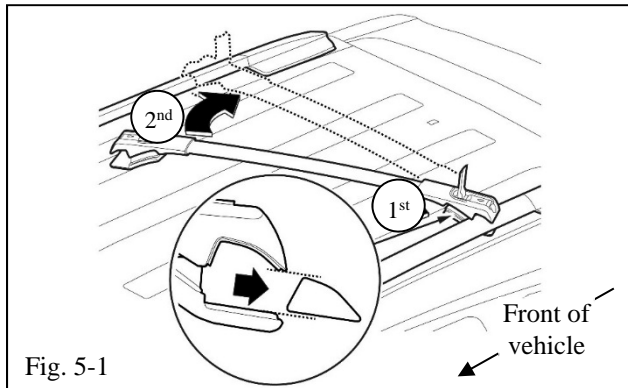
- (c) Straighten the crossbar so that the front of the support touches the line on the “forward limit” warning label (2 places) (Fig. 3-2).

⚠ NOTE: DO NOT POSITION THE FRONT CROSSBAR ON OR FORWARD OF THE WARNING LABEL.

- (d) Make sure the FORWARD arrows on the crossbar supports are pointing toward the front of the vehicle (Fig. 3-2).

4. Secure the Front Crossbar.

- (a) Turn the lever clockwise to tighten the clamp to the crossbar (2 places) (Fig. 4-1).
- (b) After the lever is tight, back off until the lever lines up with the opening in the support, and close the lever (2 places) (Fig. 4-1).
- (c) Use the supplied key to turn the lock in the lever to lock the crossbar in position (2 places) (Fig. 4-1).



5. Install the Rear Crossbar.

- (a) Install the rear crossbar at an angle parallel with the roof surface (Fig. 5-1).
 - (1) Slide the 1st support over the side rail.
 - (2) Rotate the 2nd support rearward over the side rail.

⚠ NOTE: Make sure the clamp is open enough to clear the side rail. DO NOT FORCE IT ONTO THE SIDE RAIL.

- (b) Straighten the rear crossbar so that the rear of the crossbar is 51mm (2.0 in.) from the front of the rear rail cover (2 places) (Fig. 5-2).
- (c) Make sure the FORWARD arrows on the crossbar supports are pointing toward the front of the vehicle (Fig. 5-2).

6. Secure the Rear Crossbars.

- (a) Turn the lever clockwise to tighten the clamp to the crossbar (2 places) (Fig. 6-1).
- (b) After the lever is tight, back off until the lever lines up with the opening in the support, and close the lever (2 places) (Fig. 6-1).
- (c) Use the supplied key to turn the lock in the lever to lock the crossbar in position (2 places) (Fig. 6-1).

7. Complete the Installation.

- STOP** (a) Place the Crossbar Installation Instructions and the lever key in the supplied bag and store them in the vehicle's glove box.

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"/> Ensure crossbars are secure and in correct position <input type="checkbox"/> Crossbar Installation Instructions/Key <input type="checkbox"/> Crossbar gaps <input type="checkbox"/> Crossbar orientation <input type="checkbox"/> Load Limit label <input type="checkbox"/> Forward Limit label 	<ul style="list-style-type: none"> Front crossbar should not be forward of "Forward Limit" label Installation Instructions and lever key inside vehicle glove box Ensure crossbars are fully clamped with no gaps around the end supports Ensure the crossbars FORWARD arrow is facing the front of the vehicle Ensure the Load Limit label is installed & legible (both sides) Maximum load indicated on the label is 100 lb (45 kg) Ensure the Forward Limit label is installed & legible (both sides)
<p><u>Vehicle Function Checks</u></p> <ul style="list-style-type: none"> <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>