Preparation

Part Number: PT278-42130

Kit Contents

Item#	Quantity Reqd.	Description
1	1	Crossbar Assembly Front (long)
2	1	Crossbar Assembly Rear (short)
3	1	User's Manual

Hardware Bag Contents

Item#	Quantity Reqd.	Description
1	1	Front LH Side Lower Clamp
2	1	Front RH Side Lower Clamp
3	1	Rear LH Side Lower Clamp
4	1	Rear RH Side Lower Clamp
5	1	Lever Key
6	4	Lever Assembly with t-bolt
7	2	Forward Limit Label

Additional Items Required For Installation

Item#	Quantity Reqd.	Description
1		
2		
3		

Conflicts

Recommended Tools

Personal & Vehicle	Notes
Protection	
Safety Glasses	
Safety Gloves	
Vehicle Protection	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

Recommended Sequence of Application

Item#	Accessory
1	
2	
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.



<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.



7 SAFETY TORQUE: This mark indicates that torque is related to safety.

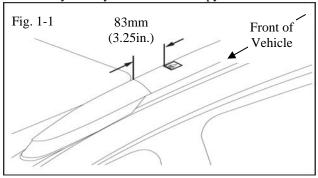
Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

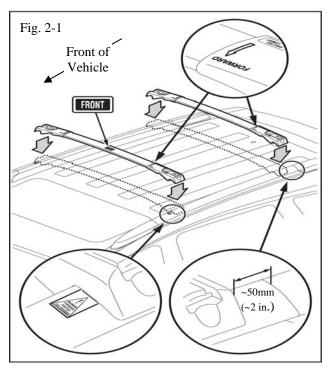
These guidelines can be found in the "Accessory Installation Practices" document.

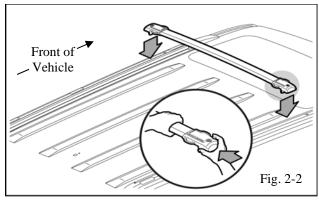
This document covers such items as:-

- 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 front crossbar "Forward Limit" warning labels to side rails.



- (a) The side rail surface temperature must be between 60°F and 110°F.
 - (a) Clean the area on the front LH side rail.



(b) Using a ruler, measure 83mm (3.25 in.) back from front of side rail.



- (c) Remove adhesive backing from label and position so that the triangle on the label is pointing to the rear of the vehicle. Label should be 83mm back from back of the front rail cover. (Fig. 1-1)
 - (d) Repeat for RH side rail.

2. Install Crossbars (Fig. 2-1)

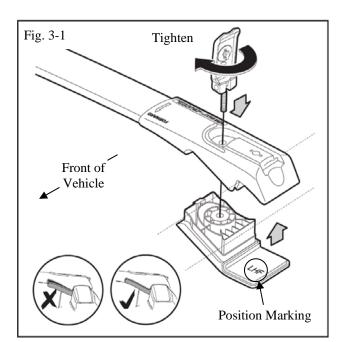


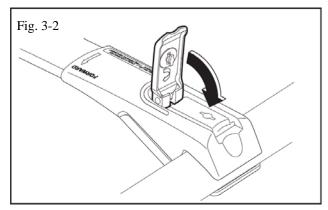
- (a) Make sure FORWARD arrows on crossbar end supports are pointing toward the front of the vehicle. (Fig. 2-1)
- (b) Load front crossbar (longer) so that the front of the crossbar touches the line on "forward limit" warning label. (2 places) (Fig. 2-1)
- (c) Load rear crossbar (shorter) so that the rear of the crossbar is ~50mm (~2 in.) from the front of the rear rail cover. (2 places) (Fig. 2-1)

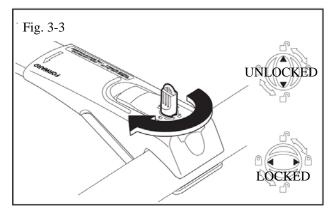


NOTE: DO NOT POSITION FRONT CROSSBAR ON OR FORWARD OF WARNING LABEL.

(d) If necessary, adjust the width of the crossbar by sliding the R.H. end support so that there is a secure fit on the side rail. (Fig. 2-2c)







3. Install Lower Clamps



- (a) Verify proper clamps prior to installation by looking for position markings on top of clamp. (4 places) (Fig. 3-1)
- (b) Carefully position clamp underneath side rail under cross bar support. Use vehicle protection to avoid contact with surface.
 While positioning the clamp, insert the lever through the hole on the support and into the clamp. Make sure lever screw engages and bottom support is flush with upper support.
 Tighten lever handle until handle bottoms out on support. (4 places) (Fig. 3-1)
- (c) After lever is tight, back off one turn, line the lever up with the opening in the support and close lever. (4 places) (Fig. 3-2)



Be careful to avoid pinching.



NOTE: ENSURE THE CROSSBAR IS SECURELY FASTENED TO THE SIDE RAILS.

(d) Using the supplied key, turn lock in lever to lock the crossbar in position. (4 places) (Fig. 3-3)

4. Install User's Manual



(a) Place Crossbar User's Manual and lever key in the vehicle's glove box.

 $Checklist\ \hbox{-- these points $MUST$ be checked to ensure a quality installation.}$

Check:	Look For:
Accessory Function Checks	
Ensure crossbars are secure and in correct position	Front crossbar should not be forward of warning label.
Crossbar User's Manual/ Lever Key	User's Manual, Installation Instructions and Lever Key inside vehicle glove box.
Crossbar Gaps	Ensure crossbars are fully clamped with no gaps around the end supports.
Crossbar Orientation	Ensure the crossbars FORWARD arrow is facing the front of the vehicle.
Vehicle Function Checks	
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. (For PPO installations, refer to TMS Accessory Quality Shipping Standard.)