

RAV4 ROOF RACK INSTALLATION INSTRUCTIONS

TOOLS NEEDED

- Flathead screwdriver
- 3/16" allen
- 5/32" allen
- 7/16" wrench
- 1/2" wrench

HARDWARE

- 1/4"-20 x 3/4" Button Head qty. 42
- 1/4" Washer qty. 42
- 1/4"-20 Flange Nut qty. 20
- M6 x 1mm thread, 25mm long Button Head qty. 10
- M8 washer qty. 10
- M8 Button Head qty. 8
- 1/4-20 x 3/8" long qty.4
- T-nut 1/4-20 qty.4
- 5/16"-18-3/4" Button Head qty. 8
- 1/4"-20-3/4" Button Head qty. 12
- 5/16" Nylon-insert Flange Locknut qty. 8
- 1/4"-20 Nylon-insert Flange Locknut qty. 12
- 1/4" Snap-in plug qty. 8

The factory roof rails are installed with through bolts and nuts on the underside of the roof. This means the install requires dropping the headliner to access them. Follow along and it will be no problem!

1. First remove the grab handle. Use a pry tool and remove the covers so you can pull the handle off. Next remove the visor with a T25 torx. To remove the visor clip, rotate it then pull it. Repeat this on both sides.









2. Remove the center panel using a pry tool. There are 4 plastic clips holding it in place. After you pull the panel off, disconnect the wire clip.





3. Remove the headliner trim around the sunroof by simply pulling it off. Next remove the A pillar panel using a pry tool. You don't need to remove the entire panel, only the top portion of clips need to come out. When you pull the panel off, make sure the clips go back into the clip holder for reinstallation. Repeat this on both sides.







4. Next we will remove the B pillar panel. Start by pull back on the door seal. Pull back on the panel to pop it loose. Remove the clip at the top of the panel so it doesn't poke the liner. Repeat this on both sides.







5. Next we will move to the rear seats of the vehicle. Remove the grab handles on both sides using the same method as the front handles. Using a pry tool, pop out the dome light (it is held in with clips).





6. Next we will move to the rear of the vehicle. Start by removing the door seal so you can get a better grip on the panel. Pull back on the panel so it hangs.







7. Use a panel tool to remove the 3 Christmas tree clips in the rear of the vehicle holding the liner in place.



8. At this point the headliner should be dropped down enough to access the roof rail hardware. There will be four nuts per side rail, two in the front above the front grab handles and two above the rear door. Remove them using a 12mm socket or wrench.





9. With the nuts removed, the factory rail will be held in with clips and a small adhesive tape at the front. Pull up to pop the clips and remove the rails.





10. Assemble the roof rack on the ground. Start by laying out all of the parts and bolt the crossbars to one side rail at a time using 1/4" button head bolts and washers. We recommend putting a little bit of anti-seize on each bolt. Be sure to install the crossbars with the milled t-nut slots facing up and all to one side.



11. Install the front and rear fairings using the same 1/4" bolt and washer with a flange nut on the inside. The front fairing will use 3 bolts per side, the rear will use 2. Slide both fairings up as far as possible and snug them up for now.





12. Hold the supplied edge trim up to the front fairing from point to point. Allow for a small overhang past each point and cut that length using a pair of snips. The edge trim has an aluminum core, so if any is protruding after the cut is made, remove it. Press the trim firmly onto the bottom edge of the front fairing.





13. Cut the leftover edge trim in half. These two pieces will be centered on each point of the rear fairing.





14. The next step is to install the mounting brackets onto the roof. They will all install the same way. The part number side will go into the channel. The front mount will look like the first photo below, with the tapered end toward the front of the vehicle. Thoroughly clean the channel to make sure it is free from dirt and debris. Put a bead of RTV silicone sealant around each mounting hole as shown and then set the mount on top. With the mount in place, add more RTV to each hole. This way the bolt will have to pass through it, creating a water-tight seal. Then install the 5/16" button head bolts with lock-nuts on the underside. Get them started and get them just hand tight for now.







15. The middle mounts will have the slight taper towards the front as well as shown. Install them using the same method and hardware as the front mounts.



16. The rear mounts will taper slightly toward the front as well and use the rear most hole in the channel. They will install using the same method, with the exception of 1/4" hardware instead of 5/16".



17. Install the provided plastic caps in the remaining 4 clip holes on each side. Put a small bead of RTV around each hole and press them into place.





18. Have a friend help you lift the rack onto the roof. Line the mounting holes on the side rails up with the roof mounts. While holding it up, get a bolt through at the front and back to hold it in place.





19. Loosely install all of the mounting hardware.

20. Now fully tighten all of the roof mounting bolts using a 3/16" allen and 1/2" wrench (the rear mount on each side will use a 5/32" allen and a 7/16" wrench).



21. With the mounts tight to the roof, adjust the height of the rack, ensuring that there is an even gap between the roof and the rack from front to back. With the rack leveled, tighten down the mounting bolts using a 5/32" allen.



22. We recommend installing some 3M paint protection film under the edge trim on the front and rear fairings. This will protect the paint from any debris that may get caught under the trim over time. Remove the bottom bolt(s) and flip the fairing up out of the way to do so. Then re-install the fairing bolts, slide it down tight to the roof and tighten up the bolts.





23. Now, reassemble the interior in reverse order of taking it apart. Re-install the rear headliner Christmas tree clips and make sure that the back edge of the headliner sits behind the hatch seal.



Pop the rear interior panel and rear door seals back into place





Reinstall the rear grab handles and then pop the dome light back in place.





Make sure the headliner is above the door seal and snap the B-pillar trim back in place.



Reinstall the front grab handles.



Make sure the A-pillar clips are in place, then snap the A-pillar trim back in place.



Push the headliner up so the sun visor clips stick out past it and then reinstall the sun visors. The clip will push straight in and the mounting bracket will reinstall using a T-25 torx.







Plug the overhead console back in and snap it back into place.





Press the sun roof trim back in place, start in one corner and work your way all the way around.





24. That's it! Enjoy your new roof rack!