



## GENERAL INSTRUCTION GUIDELINES

### READ THIS FIRST:

- Read these instructions fully prior to beginning work. Verify all parts listed below are in the kit packaging, and all tools, equipment, skills and methods are on hand to safely complete the installation.
- Read the attached GENERAL INSTALLATION NOTES prior to beginning any work.
- Installation of these components should be performed by experienced and qualified mechanics, using safe and correct tools and equipment. Northwoods recommends this installation be performed by a qualified, certified automotive shop.
- Use safe methods in all work operations. Support the vehicle safely as required on a lift or hoist, or certified jack stands.

## GENERAL INSTALLATION NOTES

- Installation shall be performed by qualified, experienced mechanics capable of performing this type of work. Northwoods recommends the work be performed in qualified ASE certified shops.
- Use only quality, certified tools and equipment appropriate for the job.
- Vehicle should only be supported by certified hoists, lifts, or jackstands of adequate capacity.
- Use only certified, dedicated spring compressors to compress and assemble springs. Northwoods recommends springs only be assembled and installed by qualified auto repair shops, using dedicated spring compression tools.
- Actual lift heights will vary by vehicle due to vehicle accessories, weights, loading, wear, initial ride height, and other factors.
- Upon completion of installation of springs or other suspensions and steering components, vehicles should be immediately aligned at a qualified shop.
- Modification to vehicle ride height requires re-alignment of headlights.
- Full inspection of all components installed should be checked after 300 miles of driving, including torque of all fasteners.
- Modified vehicles will handle and perform differently from stock vehicles, and the modified vehicle characteristics should be considered for driving safety. Modified vehicles may have affects to vehicle steering and response, and increased braking distances due to increased vehicle weight or larger tires.
- Modified vehicles may exhibit increased wear to suspension and other components, as well as an increase in vibration due to changes in component alignment and operating angles.
- Northwoods Performance Warranty, Return, and Replacement policies can be found on-line at [northwoodsperformance.com](http://northwoodsperformance.com), RESOURCES tab.



## LIGHT BAR INSTALLATION INSTRUCTIONS

RAV4 GEN 4, 2013-2018

RAV4 GEN 3, 2006-2012

Installation time: about 1 hour

### MATERIAL LIST

- Light Bar 1
- Mounting tubes 2
- Frame Mount Studs 2
- Frame Mount Stud Star Washers 2
- Flange bolt, M10x80 2
- Nyloc nut, M10 2
- Washer, M10 2

1. Remove the two factory tow point covers from the bumper fascia. Covers on 16-18 Gen4, and Gen3's will be slightly different but in same relative locations.



2. Apply Blue Loctite to threads, and insert a Frame Mounting Stud and Star Washer into a Mounting Tube with a socket and extension, with the small fishmouth facing out. Align the large part of the fishmouth toward the center line of the car, and align the mounting holes vertically. Install the Frame Mounting Stud hand tight. Install both left and right side Tubes.



3. Install the Light Bar, with tabs over the Mounting Tubes. Verify alignment of the bolt holes, and verify the fishmouth is flush around the Light Bar tube all the way around. Rotate the Mounting Tubes slightly to align.
4. Remove the Light Bar, and torque the Frame Mounting Studs to 100 ft-lbs.
5. Re-install the Light Bar. Insert Flange bolts from the top down, with washer and Nyloc nuts below. Torque to 50 ft-lbs.



6. Mount up some flame thrower lights and enjoy your light bar!