



SKID PLATE INSTALLATION INSTRUCTIONS

2013-2018 Toyota Rav4

Installation time: 2-3 hours

IMPORTANT:

- Read the attached GENERAL INSTALLATION NOTES prior to beginning any work.
- Read these instructions fully prior to beginning work to verify all tools, equipment, skills and methods are on hand to safely complete the installation.

SKID PLATE KIT MATERIAL LIST

- Skid Plate
- PKG 1 2 each 7/8" spacer, 120mm bolt, washer
- PKG 2 2 each 1-3/4" spacer, 80mm bolt, washer
- PKG 3 2 each 1-1/4" spacer, 110mm bolt, washer

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 automotive shop.

1. Support the vehicle safely on a lift or hoist, or certified jack stands.
2. It is recommended that the negative battery cable be disconnected during all maintenance procedures.
3. Size references below are wrench sizes, unless otherwise noted.

1. Remove the factory air dam.



2. Remove two front frame bolts, inboard side, one from each side. Left side shown in pic. 17mm



3. Remove two rear frame bolts, one from each side, outboard side. Left side shown in pic.



4. If required on some models, cut and remove unused frame brackets for skid plate installation.
5. Install the skid plate with the new provided hardware, 19mm socket.
 - PKG 1 bolts and spacers are installed in the two front holes.
 - When using a Northwoods Performance high clearance exhaust, PKG 2 bolts and spacers are installed in the tow rear holes.
 - When using stock exhaust, install the PKG 3 bolts and spacers WITH the spacers from PKG 2 for a total spacer height of 3" on each rear bolt.
 - Installation stack up: frame, spacer(s), skid plate, washer, bolt.
6. In order to get bolt holes to line up, may need to loosen additional sub frame cross member bolting to get bolt holes to align.
7. Tighten all bolts securely.



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 assemble and installed by qualified auto repair shops.
- Actual lift heights will vary by vehicle due to vehicle accessories, weights, loading, wear, 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.