



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, RESOURCES tab.



SKID PLATE INSTALLATION INSTRUCTIONS

HIGHLANDER G3 2014 – 2019, RX350 2010 – 2015, RX450H 2010 - 2015

Installation time: 2-3 hours

SKID PLATE KIT MATERIAL LIST

SKID PLATE		1
PKG 1, Front Mount	12M-1.25 120mm bolt	2
	12M Flat washer, small diameter	2
	12M Flat Washer, large diameter	2
	12M Hex Nut	2
	Spacer bushing, 1-1/4"X1-1/4" tall	2
PKG 2, Rear Mount	12M-1.25 120mm bolt	2
	12M Flat washer, small diameter	2
	12M Flat Washer, large diameter	4
	12M Hex Nut	2
	Spacer bushing, 1"X1-1/8" tall	2

NOTE: USE OF JACKSTANDS OR FLOOR JACKS, WITH THE CAR SAFELY SUPPORT IN THE AIR, ARE HELPFUL

SKID PLATE INSTALLATION

1. Remove the factory mid-engine splash guard.



2. Locate the two indents on the front sub frame cross member. The bottom and/or top of the holes may have rubber caps on them. Remove the caps.



FRONT
MOUNTING
HOLES

REAR
MOUNTING
HOLES

3. Locate the rear mounting holes on the side engine sub frame rails. They may have caps that need removed also.
4. Place the skid plate into position. Install the rear bolts and hardware to position the skid plate. From the bottom up, installation is 120mm bolt with large washer, skid plate, large washer, spacer bushing, frame rail, small washer, nut. Tighten nut finger tight, both sides.
5. Verify the skid plate is aligned and centered between the frame rails. With a pen, mark the center position of the skid plate front mounting holes onto the front factory splash guard.
6. Remove the skid plate, and the front splash guard.
7. Drill 1-1/2" holes in the front splash guard centered on the holes marked. This can be drilled with a hole saw, or cut with a utility knife.



1-1/2" holes both
sides for skid
mounting bolts.

8. Reinstall the front splash guard. Leave the left and right side splash guards in front of the tires loose and positioned away from the frame slightly. This will allow access to reach the upper washer and nut for installation.



9. Install the skid plate. Loosely reinstall the rear hardware.
10. Install the front hardware from the bottom up—120mm bolt with washer, skid plate, spacer bushing, front frame cross member, small washer, nut.
11. Tighten all skid hardware securely.
12. Reinstall the side splash guards.



Steel skid plate in bare metal finish shown.