

# 69-**4420 2" Nissan Rogue**



READ INSTRUCTIONS THOROUGHLY AND COMPLETELY BEFORE BEGINNING INSTALLATION.

INSTALLATION BY A CERTIFIED PROFESSIONAL MECHANIC IS HIGHLY RECOMMENDED.

READYLIFT® IS NOT RESPONSIBLE FOR ANY DAMAGE OR FAILURE RESULTING FROM IMPROPER INSTALLATION.

### Safety Warning

#### MISUSE OF THIS PRODUCT COULD LEAD TO INJURY OR DEATH.

Suspension systems or components that enhance the on and off-road performance of your vehicle may cause it to handle differently than it did from the factory. Extreme care must be used to prevent loss of control or vehicle rollover during abrupt maneuvers.

Always operate your vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Failure to drive safely may result in serious injury or death to driver and passengers.

Driver and passengers must ALWAYS wear your seat belts, avoid quick sharp turns and other sudden maneuvers. ReadyLIFT Suspension does not recommend the combined use of suspension lifts, body lifts, or other lifting devices.

You should never operate your vehicle under the influence of alcohol or drugs.

Constant maintenance is required to keep your vehicle safe. Thoroughly inspect your vehicle before and after every off-road use.

It is the responsibility of the retailer and/or the installer to review all state and local laws, with the end user of this product, related to bumper height laws and the lifting of their vehicle before the purchase and installation of any ReadyLIFT products.

It is the responsibility of the driver/s to check their surrounding area for obstructions, people, and animals before moving the vehicle.

All raised vehicles have increased blind spots; damage, injury and/or death can occur if these instructions are not followed.

### **Installation Warning**

All steps and procedures described in these instructions were performed while the vehicle was properly supported on a two post vehicle lift with safety jacks.

Use caution during all disassembly and assembly steps to insure suspension components are not over extended causing damage to any vehicle components and parts included in this kit.

Included instructions are guidelines only for recommended procedures and are not meant to be definitive. Installer is responsible to insure a safe and controllable vehicle after performing modifications.

ReadyLIFT Suspension recommends the use of an OE Service Manual for model/year of vehicle when disassembly and assembly of factory and related components.

Unless otherwise specified, tighten all bolts and fasteners to standard torque specifications listed within the OF Service Manual.

Suspension components that use rubber or urethane bushings should be tightened with the vehicle at normal ride height. This will prevent premature wear or failure of the bushing and maintain ride comfort.

Larger tire and wheel combinations may increase leverage on suspension, steering, and related components.

Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle ride height. Always measure the vehicle ride height prior to beginning installation.

This suspension system was developed using a 245-65R17'' tire with  $17'' \times 8''$  wheel and a offset of +38. If wider tires are used, offset wheels may be necessary and trimming may be required. Factory wheels can be used but are not recommended with tires over 11.5'' wide.

The stock spare rim can be run in an emergency - exercise extreme caution under stock spare tire operating conditions. Please note that, if running the spare factory tire, it is done for short distances and a speed not to exceed 45mph or damage to differentials may occur.

# **IMPORTANT NOTE:**

Have all electronic systems reset according to the factory service manual (steering wheel angle sensors, active cruise control, lane departure, etc.).

Have the alignment set to the recommended alignment specs located on the last page of this instruction booklet.

### VEHICLE HEIGHT MEASURMENTS

	Driver Before	Driver After	Passenger Before	Passenger After
Front				
Rear				

### **BILL OF MATERIALS**

Front Strut Spacer	2
Rear Spring Spacer	2
Front Sway Bar Bracket	2
M12 Bolt	2
M12 Nut	2
M12 Washer	4
3/8" Bolt	6

# **AWARNING**

<u>Before starting installation:</u> ReadyLIFT Suspension highly recommends that the installation of this product be performed by a professional mechanic with experience working on and installing suspension products. Professional knowledge and skill will typically yield the best installation results.

### INSTALLATION BY A PROFESSIONAL IS HIGHLY RECOMMENDED.

- A Factory Service Manual for your specific Year / Make / Model is highly recommended for reference during installation.
- All lifted vehicles may require additional driveline modifications and / or balancing.
- A vehicle alignment is REQUIRED after installation of this product.
- Speedometer / Computer recalibration is required if changing +/- 10% from factory tire diameter.
- A vehicle lift or hoist greatly reduces installation time. Installation time estimates are based on an available vehicle hoist.
- Vehicle must be in excellent operating condition. Repair or replace any and all worn or damaged components prior to installation.

# \*\*\*Parts shown in red for picture clarification only\*\*\*

ReadyLIFT recommends all steps and procedures described in these instructions be performed while the vehicle is properly supported on a two post vehicle lift with safety jacks.

Otherwise, park vehicle on a clean flat surface and block the rear wheels for safety. Engage the parking brake.

Disconnect the vehicle power source at the ground terminal on the battery.

Lock the steering wheel in the straight forward position with the column lock or steering wheel locking device. Allow vehicle to cool before starting any work as you will be working in the engine bay.

Raise the front of the vehicle and support with safety jack stands at each jack point behind the lower control arms. Remove the front wheels.

Remove the plastic cover from both driver and passenger wiper arms. Remove the mounting nut. Mark the windshield wiper location against the shaft for reinstallation. Gently lift up on the wiper arm while slightly twisting. The arm should pop off the shaft. Set aside.



Locate the 6 plastic clips holding the cowl to the body. Remove all the clips and set aside. Gently lift up on cowling from the engine bay side, while lifting pull towards the front of the vehicle to disengage from the windshield. Once disengaged from the windshield, set aside in the engine bay.



Support the lower control arm with a suitable jack.



Remove the upper strut hardware from the strut tower.



Lower the jack to allow the suspension to droop out. Make sure that the brake lines and ABS wires are free and clear from any obstruction. Adjust as necessary.



Install the ReadyLIFT strut extension onto the factory top hat using the factory hardware. This is a tight fit to get the bolts into place. The top hat can be rotated to access the bolts. Once all have been started, tighten all down.



Use of a stubby wrench with a ratcheting head is recommended. Torque to 15 ft-lbs. You may have to use a crows foot wrench head and extension to gain access for the torque wrench. Raise the suspension using the jack while lining the upper strut extension up with the bolt holes on the strut tower. Use of a helper will aid in the installation. Install the strut assembly to the strut tower using the provided 3/8" bolts. Once all three bolts have been started, torque to 30 ft-lbs.

Install the ReadyLIFT sway bar bracket to the strut using the provided M12 bolts, washers and nuts. Install the sway bar end link to the bracket using the factory hardware. Torque all to 5 ft-lbs.

Install the cowl to the body using the 6 factory plastic clips. Make sure to engage the windshield channel. Install the driver and passenger wiper arms to the shafts lining up the previously made marks using the factory hardware. DO NOT use an impact gun on these. Torque to 5 ft-lbs. Install the plastic covers.

Install the wheels and lower the vehicle to the ground. Torque the lug nuts to the wheel manufacturer's specs. Raise the rear of the vehicle and support with safety jack stands at each jack point in front the lower control arms. Locate the brake line at the body. Remove the spring clip from the mount.









Gently pull on the brake line ferrule and slide the metal brake line through the mount. This is done to give slack for lowering the control arm. Do not bend or mangle the metal line.



Remove the sway bar from the frame and let hang out of the way.



Support the lower control arm with a suitable jack and remove the lower shock hardware.



Loosen but do not remove the control arm hardware at the knuckle and the sway bar end link at the sway bar and lower control arm. This is to allow the full droop without binding the rubber bushings.



Loosen but do not remove the control arm hardware at the frame.



Move the jack to the front of the lower control arm. Use of a pair of locking pliers in the front drain hole will aid in keeping the jack from sliding up the arm.



Remove the lower control arm cam bolt. Lower the control arm down while watching the brake line for binding or stretching. Adjust as necessary.



Once the control arm is lowered enough, remove the rear spring from the frame. Note the orientation of the lower spring pig tail and the locking tab on the lower isolator for reinstallation.



Install the ReadyLIFT rear spring spacer on top of the factory isolator. Install the spring back into the vehicle. Make sure the lower spring is orientated to the spring lock on the lower isolator.



Use the jack on the lower control arm to raise the pivot back into the frame pocket. Use of a helper to pull on the suspension to line up the holes will aid in installation. Install the cam bolt from the back to the front (opposite of the way it was removed). This is not necessary, but can make installation easier.



Once the lower control arm is installed into the frame pocket, move the jack to the back of the control arm and raise the arm enough to install the rear shock hardware. Do not tighten at this time.



Reinstall the brake line ferrule through the metal mount on the body. Install the spring clip.



Once both sides of the vehicle are completed, raise the sway bar up and install to the frame using the factory hardware and clamp. Torque to 30 ft-lbs.



Install the wheels and lower the vehicle to the ground. Torque the lug nuts to the wheel manufacturer's specs.

Jounce the vehicle a few times to get it the suspension to settle to the new ride height. Torque the lower shock hardware to 45 ft-lbs, the lower and upper control arm hardware to 125 ft-lbs. Final torque of the cam bolts to be set by the alignment tech during the alignment.

Reconnect the vehicle power source at the ground terminal. Start the engine and rotate the wheels from steering lock to lock making sure all clearances between suspension, wheels, tires, body, brake lines, and ABS wires are all sufficient. Adjust as necessary.

Have the vehicles alignment set to the recommended specs on the last page of this instruction booklet by a reputable alignment shop. Make sure to have all electronic systems reset (steering wheel angle sensors, lane departure, active cruise control, etc.) according to the factory service manual.



FAILURE TO PERFORM THE POST INSPECTION CHECKS MAY RESULT IN VEHICLE COMPONENT DAMAGE AND/OR PERSONAL INJURY OR DEATH TO THE DRIVER AND/OR OTHERS.

### Final Checks & Adjustments

Once the vehicle is lowered to the ground, check all parts which have rubber or urethane components to ensure proper torque. Torque lug nuts to the wheel manufacturer specs. Move vehicle backwards and forwards a short distance to allow suspension components to adjust. Turn the front wheels completely left then right and verify adequate tire, wheel, brake line, and ABS wire clearance. Test and inspect steering, brake and suspension components for tightness and proper operation. Inspect brakes hoses and ABS lines for adequate slack at full extension, adjust as necessary.

RECHECK ALL HARDWARE FOR PROPER TORQUE VALUES AFTER 500 MILES, AND THEN PERIODICALLY AT EACH SERVICE INTERVAL THERAFTER.

### Vehicle Handling Warning

Increasing the height of your vehicle raises the center of gravity and can affect stability and control. Use caution on turns and when making steering corrections.

Vehicles with larger tires and wheels will handle differently than stock vehicles. Take time to familiarize yourself with the handling of your vehicle.

### Wheel Alignment/Headlamp Adjustment

It is necessary to have a proper and professional wheel alignment performed by a certified alignment technician. Align the vehicle to factory specifications. It is recommended that your vehicle alignment be checked after any off-road driving.

In addition to your vehicle alignment, for your safety and others, it is necessary to check and adjust your vehicle headlamps for proper aim and alignment. If the vehicle is equipped with active or passive safety/collision monitoring and/or avoidance systems including, but not limited to, camera- or radar-based systems, check and adjust your vehicle's systems for proper aim and function.

### RECOMMENDED ALIGNMENT SPECS

Front	Driver	Passenger	Tolerance	Total / Split
Toe	+.07	+.07	+/-0.05	+.14
Rear	Driver	Passenger	Tolerance	Total / Split
Camber				
Toe				

View other performance suspension parts made by ReadyLIFT on our website.