

PRO SUSPENSION SYSTEMS RYDE

EXACTLY THE WAY YOU WANT IT.™

PRORYDE ADJUSTABLE UPPER STRUT FRONT LIFT KIT INSTALLATION

2005+ NISSAN FRONTIER/ XTERRA/ PATHFINDER
2005-2015 SUZUKI EQUATOR
PATENTED

IMPORTANT!

Read ALL WARNINGS and information contained in these instructions PRIOR to installing this product. Vehicle Owner MUST be provided the IMPORTANT VEHICLE OWNER'S INFORMATION section of these instructions after installation of this product.

Bill of Materials

- (1) Installation Instructions & Warnings
- (2) 4-Piece Patented Upper Strut Kits
- (6) M10-1.5 Nylock Nuts
- (2) 1-1/4"-12 Large Adjustment Locking Jam Nuts
- (2) 1-1/8" Snap Rings
- (2) 1/2" Jam Nut Spacers
- (2) Tear-Resistant Nylon Bearings



ALWAYS WEAR PROPER EYE PROTECTION & USE TOOLS SPECIFIC TO THE JOB!

THIS PRODUCT HAS BEEN FACTORY PRE-TREATED WITH MARINE GRADE ANTI-SEIZE COMPOUND. NO LUBRICATION OF THE LARGE ADJUSTER THREADS IS NECESSARY PRIOR TO INSTALLATION.

STEP 1: Position vehicle on a stable, flat surface or automotive lift. Secure vehicle with wheel chocks. Be sure engine is turned OFF and vehicle is in PARK.



STEP 2: On a flat, level surface, MEASURE preinstallation ride height, FRONT & REAR, and write down measurements.
Front (L) _____
Front (R) _____
Rear (L) _____
Rear (R) _____



STEP 3: Suspend front wheels, lifting by the frame. We recommend working on one side at a time.



STEP 4: Remove front wheel and support lower control arm with floor or bottle jack.



STEP 5: Disconnect ABS/ vacuum line brackets, if equipped, to allow slack.



STEP 6: Disconnect sway bar from the sway bar link at the top on both sides. Move sway bar out of the way.



STEP 7: Remove tie rod end cotter pin. Loosen but don't completely remove the nut. Leave it on to protect the threads, but loose enough to remove with your fingers. Use hammer or joint removal tool to separate the taper.



STEP 8: Remove upper ball joint cotter pin. Loosen but don't completely remove the nut. Leave it on to protect the threads, but loose enough to remove with your fingers. Use hammer or joint removal tool to separate the taper.



STEP 9: Loosen and remove lower strut bolt and nut.



STEP 10: Loosen and remove three upper strut mounting nuts.



STEP 11: Carefully swing knuckle assembly out of the way, taking care to not over extend axle. Slowly lower jack set in Step 4. Remove strut assembly.



STEP 12: Secure new LIFTmachine kit to the strut assembly, using new M10-1.5 nylock nuts supplied.

*****Be sure the Threaded Adjustment Screw Rotates FREELY after securing kit to the OEM strut.*****



STEP 13: Trim strut mounting studs flush with top of OEM nut.



STEP 14: *IMPORTANT* Before reinstalling strut assembly make sure to install white tear-resistant nylon bearing plate!



STEP 15: IMPORTANT! Be sure the Threaded Adjustment Screw Rotates FREELY after securing kit to the OEM strut. If not, slightly loosen the three upper stud nuts and rotate the Threaded Adjustment Screw slightly UPWARD. Re-torque upper stud nuts to OEM specifications and recheck that the Threaded Adjustment Screw now rotates properly for adjustment after installation. **If this is skipped the kit will not adjust after installation!!**

STEP 17: Install Top Connection Plate using supplied M10-1.5 nylock nuts. Torque to 45 ft-lbs.



STEP 19: Install Jam Nut Spacer followed by Jam Nut and Snap Ring. After final height adjustment tighten Jam Nut and reinstall bracket removed in Step 15. ****TIP** To aid in future adjustments; coat threads between Jam Nut and Inner Adjustment Screw with anitseize.**



STEP 21: Supporting the lower control arm with a jack, use a ratchet strap or similar device to hold upper arm down so ball joint taper seats into knuckle. ****TIP** raise lower control arm with jack while making sure vehicle stays stable.**



STEP 23: Reinstall Tie rod nut, torque to manufacturer's specifications. Install new cotter pin (not included). Reinstall sway bar end link and torque to manufacturer's specifications.



STEP 16: Remove bracket on top of strut tower. Retain hardware for reinstallation.



STEP 18: Rotate strut assembly 180* and install into vehicle.



STEP 20: Reinstall lower strut bolt and nut. Torque to manufacturer's specifications.



STEP 22: Reinstall ball joint nut and torque to manufacturer's specifications. Install new cotter pin (not included).



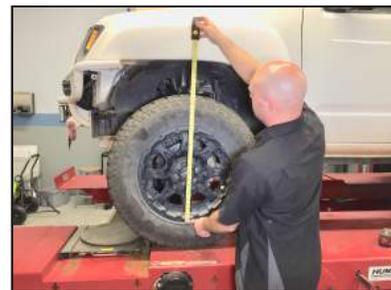
STEP 24: Reconnect ABS/Vacuum line brackets, that were disconnected in Step 5.



STEP 25: Reinstall tire/wheel assemblies, and check that ALL suspension components and lug nuts have been properly torqued to manufacturer's specs.



STEP 26: Lower the vehicle, jounce suspension and measure ride height of EACH SIDE of the vehicle. Measure from the bottom of the wheel/rim to the lip of the fender.



STEP 27: IMPORTANT! ADJUSTING FRONT RIDE HEIGHT AFTER INSTALLATION.

- 1) Lift vehicle by the frame, allowing wheels to hang freely. Secure using jack stands & wheel chocks.
- 2) Loosen the Large 1-1/4"-12 Top Jam Nut several complete turns.
- 3) Using a standard 1/2" ratchet, engage the 1/2" Threaded Adjuster at the TOP of the new lift kit.
- 4) Turn **COUNTER-CLOCKWISE** to **INCREASE** ride height, and **CLOCKWISE** to **DECREASE** ride height.
- 5) Each full turn of the Threaded Adjuster will result in approximately 1/4" of ride height change.
- 6) Each 1/2 turn of the Threaded Adjuster will result in approximately 1/8" of ride height change.

LOWER THE VEHICLE, JOUNCE SUSPENSION, AND MEASURE RIDE HEIGHT. BE SURE VEHICLE IS LEVEL FROM SIDE-TO-SIDE AND AT THE DESIRED RIDE HEIGHT, MAKING ADDITIONAL ADJUSTMENTS AS REQUIRED. RETORQUE ALL FASTENERS TO OEM SPECS.

IMPORTANT! RETIGHTEN THE LARGE 1-1/4"-12 TOP JAM NUT AFTER FINAL ADJUSTMENTS ARE MADE.



STEP 28: Perform a complete wheel alignment, utilizing a Certified Alignment Technician with experience working on lifted vehicles.



STEP 29: ADJUST HEADLIGHTS to accommodate new front ride height position

IMPORTANT! Check all fasteners for proper torque. Check to insure there is adequate clearance between all rotating, mobile, fixed and heated members. Check steering for interference and proper working order. Test brake system.

Before:



After:



Complete a full 4-corner lift and install a ProRYDE ADJUSTABLE Rear Shackle Kit!



IMPORTANT VEHICLE OWNER'S INFORMATION

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Adjusting Lift/Leveling kit after installation

(1) Always wear proper eye protection! Position vehicle on a stable, flat surface and SUSPEND FRONT WHEELS, lifting by the frame with a floor jack or lift jack. Secure frame with jack stands. Chock tires and turn engine OFF prior to adjustment!

(2) Loosen the Large Top Jam Nut at top of strut tower SEVERAL complete turns.

(3) Using a 1/2" ratchet, engage the 1/2" Threaded Adjuster at the TOP of the Adjustable Upper Strut Kit. **Turn COUNTER-CLOCKWISE to INCREASE ride height, and CLOCKWISE to DECREASE ride height.**

(4) JOUNCE SUSPENSION and be sure vehicle is LEVEL from side-to-side and at the desired ride height, making adjustments as required. Re-torque all fasteners to OEM specifications and **retighten the Large Top Jam Nut** to the Top Connection Plate of the kit!

Under no circumstances should this product be altered to adjust ride height beyond its design limits.

Remember! Any change to ride height will affect vehicle's Wheel Alignment and Handling! Always realign the vehicle any time ride height is adjusted, and be sure to adjust headlights as necessary.

Minimum Ride Height Change: 1.0" (at wheel well)

Maximum Ride Height Change: 2.5" (at wheel well)

WARNING

This product should only be installed and adjusted by an ASE certified professional mechanic with proper tools and safety equipment.

Installation of this product modifies vehicle ride height. The driver of this vehicle should avoid unnecessary or abrupt maneuvers, sharp turns and other driving conditions that could lead to rollover or other serious accident. This product will affect vehicle center of gravity resulting in less than the original OE stability characteristics.

The manufacturer of this product releases itself from any liability or consequence, inclusive but not limited to personal injury, failure of components or damage to vehicle or person as a result of installing this product.

Warranties may be declined for any parts installed by any person other than an ASE certified professional. No warranty will be made for any other OEM or aftermarket components that may be affected by the installation of this product either in use or during installation. This kit is intended for use on stock suspensions WITHOUT any previous modifications whatsoever. Installation of this kit in conjunction with other aftermarket products will be done at vehicle owner's own risk, and voids any and all warranties.

Installation of this part MAY limit or void some vehicle manufacturer's warranties!

ALWAYS DRIVE SAFELY, REDUCE SPEED, AND WEAR YOUR SEAT BELT.

LIMITED LIFETIME WARRANTY

This product is warranted to be free of defects in materials and workmanship to the original purchaser on the vehicle in which it is originally installed. This warranty does not cover loss of time, labor, or any other components as a result of damage. This warranty may be void if this product is installed by any person other than an ASE certified professional.