

PRO RYDE SUSPENSION SYSTEMS

EXACTLY THE WAY YOU WANT IT.™

PRO RYDE ADJUSTABLE UPPER STRUT FRONT LIFT KIT INSTALLATION

2019 AND NEWER FORD RANGER 2WD/4WD
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) 3-Piece Patented Upper Strut Kits
- (6) M10-1.5 Nylock Nuts
- (2) 1-1/4"-14 Large Adjustment Locking Jam Nuts (1 1/2" HEX)
- (2) 1-1/4" Snap Rings
- (4) 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.

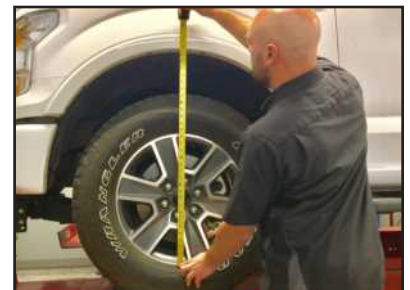
PLEASE READ THROUGH AND UNDERSTAND ALL STEPS BEFORE STARTING INSTALLATION

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. Secure with jack stands. Remove skidplate (if equipped).



STEP 4: Working on one side of vehicle at a time, remove front wheel and support lower control arm with floor or bottle jack.



STEP 5: Disconnect ABS/ vacuum line bracket, to allow slack. Also remove brake line bracket from inner fender.



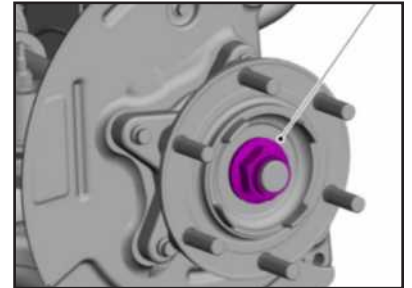
STEP 6: Disconnect sway bar link from the knuckle. Loosen and remove sway bar bracket nuts and bolts. Pull sway bar out of knuckle and away from frame.



STEP 7: Using compressed air, clean the area surrounding the front wheel speed sensor. Carefully remove bolt and wheel speed sensor. Put piece of tape over hole to keep debris out.



STEP 8: Remove axle nut.



STEP 9: Loosen tie rod nut. Leave nut loose enough to remove with fingers. Strike knuckle with a hammer on outside of tie rod taper as shown.



STEP 10: Loosen ball joint nut. Leave nut loose enough to remove with fingers. Strike knuckle with a hammer on outside of the ball joint taper.



STEP 11: Remove three upper strut mounting nuts.



STEP 12: Remove lower strut mounting nuts.



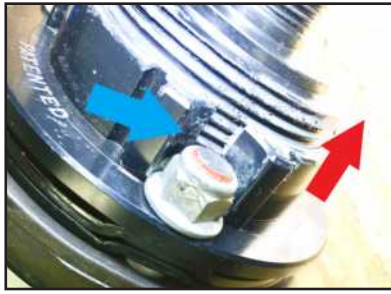
STEP 13: Loosen lower control arm cam bolts. Lower jack supporting lower control arm slowly. Pull axle out of hub carefully.



STEP 14: Carefully remove OEM strut assembly. **TIP:** While on bench, reinstall both OEM nuts so they are flush with end of lower strut studs. Place strut upside down in a vice or similar device. Using a hammer, pound out lower OEM studs. Remove nuts and studs.



STEP 15: Place kit on top of strut making sure it is extended slightly. **RED ARROW.** Tighten OEM nuts. Using a cutoff wheel trim studs even with top of OEM nut. **BLUE ARROW.** Finished stud length will be .75-.875"



STEP 16: Remove OEM nut to clean threads from cutoff wheel. Tighten OEM nuts back down and torque manufacturer's specifications. Make sure Inner Adjustment Screw will adjust by turning it left and right.



STEP 17: IMPORTANT! Be sure the Threaded Inner 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 Inner Adjustment Screw now rotates properly for adjustment after installation. **If this is skipped the kit will not adjust after installation!!**

STEP 18: Install both large and small diameter white nylon bearing plates.



STEP 19: Install Top Plate making sure it's orientated correctly. Install silver Jam Nut and Lock Ring. Turn Inner Adjustment Screw to the right to lower the kit all the way down, then back up slightly.



STEP 20: Install strut assembly back in vehicle.



STEP 21: Install lower OEM studs and nuts. Torque to manufacturer's specifications. **TIP:** Hitting top of stud with hammer will help the stud from turning.



STEP 22: Line up axle splines and reinstall axle into hub assembly.



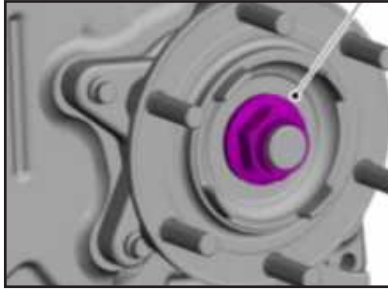
STEP 23: Using supplied nylock nuts, tighten the three upper strut nuts.



STEP 24: Using a pry bar hold upper control arm down and insert ball joint into knuckle. Torque to manufacturers' specifications. Make sure axle splines is still lined up and axle is seated correctly.



STEP 25: Install axle nut and torque to manufacturer's specifications.



STEP 26: Making sure not to introduce any dirt or debris into speed sensor hole, remove tape applied in **Step 7** and insert sensor. Using OEM hardware, torque to Manufacturer's Specifications.



STEP 27: Reconnect tie rod end and torque to Manufacturer's Specifications.



STEP 28: Reconnect sway bar link to knuckle and sway bar bracket to frame. Torque to Manufacturer's Specifications.



STEP 29: Reconnect ABS/vacuum line brackets and brake line bracket disconnected in **Step 5**.



STEP 30: Reinstall tire/wheel assemblies, and check that ALL suspension components and lug nuts have been properly torqued to manufacturer's specs. Reinstall skidplate (if equipped).



STEP 31: Lower the vehicle, **JOUNCE** the 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 32: 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"-14 Top **JAM NUT** several complete turns with 1-1/2" wrench or socket.
- 3) Using a 24MM wrench/socket or 1/2" drive ratchet, engage the Inner **Adjustment Screw IAS** 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.
- 7) Retighten **JAM NUT** after height adjustments are complete.

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"-14 TOP JAM NUT AFTER FINAL ADJUSTMENTS ARE MADE.



STEP 33: Perform a complete wheel alignment, utilizing a Certified Alignment Technician with experience working on lifted vehicles.



STEP 34: 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:



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) With a 1-1/2" wrench or socket, loosen the Large 1-1/4"-14 Jam Nut at top of strut tower SEVERAL complete turns.

(3) Using a 24mm wrench/socket or 1/2" drive ratchet, engage the Inner Adjustment Screw IAS 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: 2.00" (at wheel well)

Maximum Ride Height Change: 3.00" (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.