

# PRO RYDE SUSPENSION SYSTEMS

EXACTLY THE WAY YOU WANT IT.

## PRO RYDE ADJUSTABLE UPPER STRUT FRONT LIFT KIT INSTALLATION

FORD RAPTOR  
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 Nylok Nuts
- (2) 1-1/4"-12 Large Adjustment Locking Jam Nuts
- (2) 1-1/8" Snap Rings
- (1) 5g Synthetic Lubricant
- (2) Silver Top Connection Plate Spacers

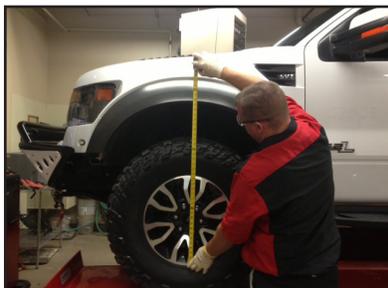


**ALWAYS WEAR PROPER EYE PROTECTION & USE TOOLS SPECIFIC TO THE JOB!**

**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:** On a flat, level surface, MEASURE pre-installation ride height, FRONT & REAR, and write down measurements.

Front (L) \_\_\_\_\_  
Front (R) \_\_\_\_\_  
Rear (L) \_\_\_\_\_  
Rear (R) \_\_\_\_\_



**STEP 2:** Position vehicle on a stable, flat surface or automotive lift.

Suspend front wheels, lifting by the frame. Secure with jack stands & wheel chocks. Be sure engine is turned OFF and vehicle is in PARK.



**STEP 3:** Support lower control arm & spindle assemblies, then remove front wheels.



**STEP 4:** Disconnect ABS/vacuum line brackets from spindle/upper control arms.



**STEP 5:** Disconnect lower sway bar links at the control arm.



**STEP 6:** Loosen, but don't completely remove, upper ball joint & outer tie rod nuts.



**STEP 7:** With stud nuts still installed, strike each housing to separate upper ball joints & outer tie rods from their tapers.



**STEP 8:** Separating the 4WD axle shaft from the spindle will simplify removal/reinstallation of the strut after kit installation.



**STEP 9:** Disconnect & remove lower strut mounting bolts. Then completely remove upper ball joint & outer tie rod nuts (separated from their tapers in step 7).



**STEP 10:** Note upper strut OE tapered spacer & wiring orientation. Remove the wiring clip. Then, supporting the strut assembly, remove the three upper strut mounting nuts.



**STEP 11:** Remove the OE Coilover/Strut assemblies.



**STEP 12:** Again, noting OE tapered spacer orientation, remove retaining clip.



**STEP 13:** Remove OE tapered Spacer, and save for reinstallation.



**STEP 14:** Install new adjustable LIFTmachine spacer to upper strut & tighten reusing OE nuts (removed in step 10). Trim OE studs flush with top of each OE nut.



**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 reposition the Threaded Adjustment Screw slightly UPWARD. Re-torque upper stud nuts to manufacturer's specifications and recheck that the Threaded Adjustment Screw now rotates properly for adjustment after installation.

**STEP 16:** Apply 50% of the included synthetic lubricant to top of each inner adjustment screw, as shown



**STEP 17:** Install Top Connection Plate, then reinstall the OE tapered spacer (removed in Step 13). Install Silver Top Connection Plate Spacer, Large 1-1/4"-12 Jam Nut (finger-tight only) & snap ring, in this sequence.



**STEP 18:** Reinstall strut assembly, making sure to orientate the OE tapered spacer properly. The Threaded Inner Adjustment Screw should be threaded down in the most compact position for easiest reinstallation. HINT: The use of a pry bar against the lower control arm will help in the reinstallation of the strut assembly.



**STEP 19:** Using new M10-1.5 nylok nuts, supplied, secure new Top Connection Plate to the OE strut tower, and torque to manufacturer's specs. Then reinstall lower strut bolt and torque to manufacturer's specs.



**STEP 20:** Reconnect upper ball joint nut & outer tie rod nuts. HINT: The use of a bottle jack will assist in the reassembly of the ball joint to the knuckle. Reconnect sway bar link to the lower control arm. BE SURE TO CHECK YOUR WORK, and that all fasteners have been properly torqued to manufacturer's specs.

**STEP 21:** Reconnect ABS/Vacuum line brackets disconnected in Step 4.

**STEP 22:** Reinstall tire/wheel assembly, and check that ALL suspension components and lug nuts have been properly torqued to manufacturer's specs.

**STEP 23:** 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 24: 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.

**74-3250F-1213**

**STEP 25:** Perform a complete wheel alignment, utilizing a Certified Alignment Technician with experience working on lifted vehicles.



**STEP 26:** ADJUST HEADLIGHTS to accommodate new front ride height position

**Before:**



**After:**



Complete a full 4-corner lift and install a PRORYDE SuperBLOK ADJUSTABLE rear Lift Kit!



## IMPORTANT VEHICLE OWNER'S INFORMATION

### FORD RAPTOR

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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: 1.5" (at wheel well)**

**Maximum Ride Height Change: 2.25" (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.