ADJUSTABLE UPPER STRUT
FRONT LIFT/LEVELING KIT INSTALLATION

FORD F150

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.

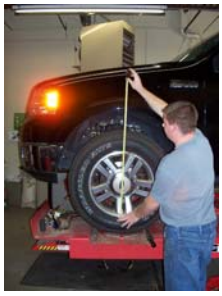
Bill of Materials

(1) Installation Instructions & Warnings
(2) 4-Piece Pat. Pending Upper Strut Kits (Ill. #1**)**
(6) M10-1.5 Nylock Nuts (Ill. #2)
(2) 1-1/4-12 Large Adjustment Locking Jam Nuts (Ill. #3)
(2) 1-1/8 Snap Rings (Ill. #4)
(1) 5g Synthetic Lubricant (Ill. #5)
(2) Top Connection Plate Spacers (Ill # 6)

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: Measure current front ride height. Take a measurement from the bottom of the wheel/rim to the lip of the fender on each side of the vehicle. Write down measurements to help in determining ride height after new kit is installed. **(Figure A)**



(Figure A)

Step 2: Position vehicle on a flat surface or automotive lift. Suspend front wheels, lifting by the frame with a floor jack or lift jack. Secure using jack stands and wheel chocks. Be sure engine is turned OFF and vehicle is in PARK. **Remove tire/wheel assembly on ONE side of vehicle**.

Step 3: Support Spindle to protect ABS system and brake lines! LOOSEN, but don't completely remove upper ball joint nut, outer tie rod nut and sway bar link nut at the lower control arm.

(Figure B)

Step 4: Break Outer tie rod and ball joint from their tapers using tools specific to this procedure. CAREFULLY, while supporting the spindle assembly, completely remove upper ball joint nut & tie rod nut, leaving the loosened sway bar link nut in place. (**Figure B)**

IMPORTANT! On 4wd models, it is important to remove the drive axle bolt using the proper tool. Failure to remove the bolt will result in a difficult reinstallation. (Figure C)

(Figure C)

Step 5: Remove strut assembly from the vehicle. Remove LOWER strut bolt first, followed by the three (3) upper strut nuts. **CAUTION!** BE EXTREMELY CAREFULL TO SUPPORT STRUT ASSEMBLY WHEN REMOVING UPPER STRUT NUTS! The Strut/Spring assembly is heavy and can cause injury to technician or damage to other components if released too quickly! **(Figure D)**

Step 6: Apply 50% of the INCLUDED Synthetic Grease to the TOP of the THREADED INNER ADJUSTMENT SCREW, as illustrated. **(Figure E)**

(Figure D)

Step 7: Using the original OEM stud nuts, secure new Adjustable Upper Strut Kit to OEM upper strut studs and torque to manufacturer's specifications. **(Figure F)**

IMPORTANT! 2004-2008 2WD models require OE upper strut studs to be trimmed above stud nut to eliminate contact with top plate of kit.

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IMPORTANT! Be sure the Threaded Adjustment Screw Rotates FREELY after securing kit to OEM top of strut! If not, slightly loosen the three upper stud nuts and reposition Threaded Adjuster Screw UPWARD slightly. Retorque upper stud nuts to manufacturer's specifications and recheck that Inner Adjuster Screw rotates freely.

(Figure E)

Step 8: Install the Top Connection Plate ONLY, studs directed UPWARD, into position in the strut tower, and secure with NEW Nylock Stud Nuts supplied with this kit. Torque stud nuts to OEM specifications. **(Figure G)**

Step 9: Reinstall strut assembly. Be sure the new Adjustable Upper Strut Kit is THREADED DOWN in the MOST COMPACT POSITION for easiest reassembly, then pass exposed threaded area of the kit THROUGH the center of the Top Connection Plate already installed. HINT: The use of a pry bar or breaker bar may simplify reinstallation of the Strut Assembly. **(Figure H)**

(Figure F)

Step 10: Install Top Connection Plate Spacer and Large 1-1/4-12 Adjustment Locking Jam Nut included with this kit and tighten until snug to Top Connection Plate. Install Snap Ring included with kit. **(Figure I)**

Step 11: Reinstall lower strut bolt and torque to manufacturer's specifications.

(Figure G)

Step 12: On 4wd models, Reinstall drive axle bolt & torque to OEM Specifications. Replace axle bolt cover cap.

Step 13: Reinstall upper ball joint nut and outer tie rod nut. Hint: The use of a bottle jack may assist in reassembly of the ball joint to the knuckle. Torque to manufacturer's specifications, including the sway bar nut.

(Figure H)

Step 14: Reinstall tire/wheel assembly, and check that all suspension components and lug nuts have been properly torqued to manufacturer's specifications.

Step 15: REPEAT STEPS 3 THROUGH 14 ON THE OTHER SIDE OF THE VEHICLE. Carefully follow each step of these instructions as you did on the first side of the vehicle!

Step 16: Lower the vehicle, jounce suspension and measure ride height of EACH SIDE. Measure from the bottom of the wheel/rim to the lip of the fender.

ADJUSTING FRONT RIDE HEIGHT AFTER INSTALLATION

(1) Lift vehicle by the frame, allowing wheels to **HANG FREELY**. Secure using jack stands and wheel chocks.
(2) Loosen the **Large Adjustment Locking Jam Nut** 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.** Each full turn of the height adjuster will result in a ride height change of approximately 1/4". Each half turn will result in a ride height change of approximately 1/8". **(Figure J)**
(4) Be sure vehicle is LEVEL from side-to-side and at the desired ride height, making adjustments as required. Retorque all fasteners to OEM specifications and **retighten the Large Adjustment Locking Jam Nut** to the top plate of the kit!

(Figure I)

Step 17: PERFORM A COMPLETE WHEEL ALIGNMENT, utilizing a Certified Alignment Technician with experience working on lifted vehicles.

Step 18: **ADJUST HEADLIGHTS** to accommodate new front ride height position.

(Figure J)

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IMPORTANT VEHICLE OWNER'S INFORMATION

FORD F150

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 Adjustment Locking 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) Be sure vehicle is LEVEL from side-to-side and at the desired ride height, making adjustments as required. Retorque all fasteners to OEM specifications and **retighten the Large Adjustment Locking 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.