71001



# 8" 2004-2008 FORD F150 2WD BASIC KIT

# F7400-1 MAIN BOX KIT 2WD W/ HARDWARE

- 1) Front X Member
- 1) Rear X Member
- 1) Left Compression Strut
- 1) Right Compression Strut
- 2 Sway Bar Drop Bracket
- 2) 6" Strut Spacers
- 2) Front Brake Line Brackets
- 1) Rear Brake Line Bracket

### 74000-20 2" STRUT SPACER

2) Strut Spacers

## HARDWARE BAG1

- 4) 18MM X 150MM BOLTS
- 4) 18MM NYLOCK NUTS
- 8) 18MM WASHERS
- 8) 7/16 x 1 1/4" bolts
- 14) 7/16 nylocks
- 22) 7/16 washers
- 3) 5/16 x 3 /4 bolts
- 3) 5/16 nylocks
- 6) 5/16" washers

### F7400-5 2WD LEFT KNUCKLE/ RIGHT

KNUCKLE

- 1) Left Spindle
- 1) Right Spindle

#### 71001-3 Rear Block and U Bolts

- 2) 5" Double Pin Flat Blocks
- 4) 9/16 X 3 X 13" U Bolts
- 8) 9/16 Nylock Nuts
- 8) 9/16 Washers

# 28420 Upper Control Arms

- 1) Left Upper A Arm
- l) Right Upper A Arm
- 1. Ensure that your work space is of adequate size and the work surface is level. Place your floor jack under the front cross member and raise vehicle. Place jack stands under the frame rails behind the front wheel wells and lower the frame onto the stands. Remove the jack and set the emergency brake, and place blocks both in front of and behind the rear wheels. Remove the front wheels.
- 2. Remove any skid plates and debris shields as necessary.
- 3. Work on one side of the vehicle at a time.
- 4. Remove the front calipers from the front disks by removing the 2 retaining bolts.

## NOTE: Make sure you do not let the calipers hang on the brake lines or damage will occur.

- 5. Remove the cotter pin, retainer and nut from the spud. Remove the front rotor and set aside.
- 6. Remove the anti-lock wiring and sensor from the back of the spindle if applicable.
- 7. Remove the dust shields from the spindle.
- 8. Using the appropriate tool, remove the tie rod end nut and carefully separate from the spindle.
- 9. Remove the upper ball joint nut from the spindle and carefully separate using the appropriate tool.
- 10. Remove the lower ball joint nut, carefully separate using the appropriate tool. Remove the spindle from the vehicle set the spindle aside.
- 11. Remove the nuts from the sway bar links on the lower a arm.
- 12. Remove the three nuts from the top of the coil over assembly and the one large nut and bolt on the bottom. Remove the coil from the vehicle.
- 13. Remove the two bolts that retain the lower a-arms and remove them from the truck.
- 14. Repeat on the other side of the vehicle.
- 15. Mark the orientation in the truck and remove the sway bar and brackets.
- 16. Install the front cross member into original front A-arm mounting locations, using the factory bolts with the heads to the front, leave loose.

- 17. Install the rear cross member into the frame with the factory bolts. The heads will face the rear of the truck.
- 18. Install the lower a-arms into the new cross members with the supplied 18mm bolts washers and nuts. you will torque the bolts at the end of the install when the vehicle is on the ground.
- 19. Torque the front and rear cross member mounting bolts to 145 ft./lbs.
- 20. Tighten all of the remaining hardware to factory specifications.
- 21. Install the front sway bar drop brackets to the frame using the factory sway bar mounting hardware. Leave loose.
- 22. Insert the 7/16" bolts, head up into the sway bar drops.
- 23. Flip the sway bar over from its original orientation and attach the factory sway bar and mounts to the new drop brackets.
- 24. Swing the sway bar ends up into position and loosely connect them to the a-arms, do not tighten until the truck is on the ground.
- 25. Torque the sway bar mount hardware to 60 ft./lbs.
- 26) Mark the location of each strut (driver and passenger side) as well as the outermost stud of each strut for later reference during reassembly.
- 27. STRUT PRELOAD SPACER ASSEMBLY AND INSTALLATION... WARNING: Extreme care must be taken during the following steps. The struts have a tremendous amount of energy stored in them and can cause serious injury or even death if an attempt is made to work on them without the proper tools. Disassembly / assembly of the struts can only be performed by a qualified professional with the special equipment designed for this task. If necessary, the struts can be taken to a shop with the proper equipment to have the necessary work performed.
- 28. Place the strut assembly in a heavy duty strut compressor and compress the coil spring enough to unload the shock. Remove the retaining nut on the upper shock mount and carefully remove the strut cylinder. Make careful note of the order and orientation of the strut pieces for proper reassembly. There is a zinc-plated compression stop cap at the top of the shock body that will need to be lightly tapped off in order to remove the lower spring seat. Save all components for re-use
- 29. Slide the preload spacer ring over the shock body so that it rests on top of the stock retaining ring. The "01" preload spacer must be used with the stock ring. Reinstall the lower spring seat and compression stop cap, and then re-assemble the strut in the same order and method in which it was taken apart. Tighten upper retaining nut, then carefully unload the coil.
- 30) Remove the factory upper control arm and Discard. Install the supplied bushing and sleeve into the FTS upper control arms. Using factory hardware, install the FTS upper control arm.
- 31) Install the FTS upper strut spacer to the factory strut using all factory hardware.
- 32. Attach the spacer to the top of the shock using the factory hardware. Torque to factory specifications. With the notch in the bottom ring facing the outside of the truck. Fit the shock and spacer into the stock mount. Fasten using the supplied 7/16" hardware.
- 33. Install the OE bolt through the lower shock mount and a-arm. Torque to factory specifications.
- 34. Torque the 7/16" hardware.
- 35. Transfer all the parts from the factory spindles to the supplied spindles. Carefully torque all of the hardware to factory specifications and replace any necessary O.E. hardware.
- 36. Support lower A-arms. Position new front spindles. Attach spindle to lower ball joint. Torque to 111 ft/lbs.
- 37. Attach the spindle to the upper ball joint. Torque to 75 ft/lbs.
- 38. Turn tie rod end 180 degrees and fasten tie rod end to the spindle and Torque to 111 ft/lbs.
- 39. Connect the anti-lock wiring harness and sensor to the spindle if applicable.
- 40. Repeat the installation on the other side of the vehicle.
- 41. Install the front rotors on to the front hub. Install the retainer nut and cotter pin. Torque to 295 ft./lbs.
- 42. Install the front calipers on to the front rotors by reinstalling the retaining bolts. Torque to factory specifications.

- 43. Remove stock brake line bracket from frame. Remount bracket with the inside of the frame and that they are not resting against any moving parts.
- 44. Install compression struts to the rear cross member using supplied 7/16" x 1 1/4" hardware.
- 45. Recheck all hardware for proper installation and torque at this time.
- 46. Reinstall the wheels and tires and lower the vehicle to the ground. Torque the factory wheels to 150 ft/lbs. If you are using aftermarket wheels follow the manufacturers recommended specifications.
- 47. Torque sway bar end links to the lower control arm to 66 ft/lbs.
- 48. Torque the 18MM bolts to 180-200 ft/lbs.
- 49. Recheck the wheel lug torque on all four wheels at this time.
- 50. On both sides of the vehicle, check the routing of the brake lines and the ABS wire harnesses. There must be no pinching, rubbing, or stretching of either component. Use zip ties to secure these items to the steering components. At full droop, cycle the steering from lock to lock while observing the reaction of these components. Reposition them if needed.
- 51. On completion of the installation, have the suspension and headlights re-aligned.
- 52. After 100 miles recheck for proper torque on all newly installed hardware.
- 53. Recheck all hardware for tightness after off road use.

#### **Rear Installation**

- 1. Block the front tires and raise the rear of the vehicle. Support the frame with jack stands forward of the rear springs.
- 2. Remove the rear wheels.
- 3. Remove the shocks on both sides of the vehicle. It may be necessary that you slightly raise the axle to unload the shocks for removal.
- 4. On drivers side, unbolt the existing brake line bracket from the inside of the frame.
- 5. Install the supplied brake line extension bracket, to the frame using the OE hardware. Then bolt the factory bracket to the new bracket using the supplied 5/16" hardware
- 6. Reroute rear ABS as necessary use the supplied zip ties to secure lines.
- 7. Support the rear axle with a floor jack and remove the U-bolts on the driver side. Loosen the U-bolts on the passenger side.
- 8. Install the lift block under the leaf spring on the axle pad, making sure the pins are fitted into the holes on the spring perch. Use your floor jack to raise the axle to the spring making sure the tabs on the factory leaf fit into the holes on the new lift block.
- 8. Secure the assembly with the supplied U-bolts and new high-nuts and washers. Do not tighten the U-bolts at this time.

### NOTE: Make sure the block sits flush on the axle perch.

- 9. Repeat the installation on the other side of the vehicle.
- 10. When the installation of the remaining side is complete, torque the U-bolts to 95 ft. lbs. If desired, excess of 1" can be trimmed from the u-bolt.
- 13. Insert the supplied sleeves inboth end of the shocks.
- 14. Install your new shocks and torque this hardware to 66 ft. lbs.
- 17. Reinstall the wheels and tires and lower the vehicle to the ground. Torque the factory wheels to 150 ft/lbs. If you are using aftermarket wheels follow the manufacturers recommended specifications.
- 18. Recheck the wheel lug torque on all four wheels at this time.
- 19. Recheck all hardware for proper installation and torque at this time.

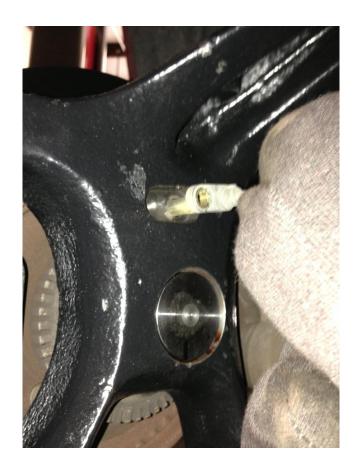
- 20. On completion of the installation, have the suspension and headlights realigned.
- 21. After 100 miles recheck for proper torque on all newly installed hardware.
- 22. Recheck all hardware for tightness after off road use.

















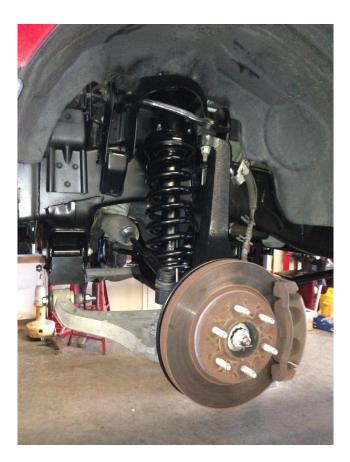








Install Rear Lift Block As Show In Picture Above









# Product Warranty and Warnings-

FTS provides a Limited Lifetime Warranty to the original retail purchaser who owns the vehicle, on which the product was originally installed, for defects in workmanship and materials.

The Limited Lifetime Warranty excludes the following FTS items; bushings, bump stops, ball joints, tie rod ends, limiting straps, cross shafts, heim joints. These parts are subject to wear and are not considered defective when worn. They are warranted for 60 days from the date of purchase for defects in workmanship.

Reservoir shocks are considered a serviceable shock with a one year warranty on leakage only. Service seal kits are available separately for future maintenance. All other shocks are covered under our Limited Lifetime Warranty.

FTS does not warrant any product for finish, alterations, modifications and/or installation contrary to FTS instructions. Alterations to the finish of the parts including but not limited to painting, powder coating, plating and/or welding will void all warranties. Some finish damage may occur to parts during shipping which is considered normal and is not covered under warranty.

FTS products are not designed nor intended to be installed on vehicles used in race applications or for racing purposes or for similar activities. (A "RACE" is defined as any contest between two or more vehicles, or any contest of one or more vehicle against the clock, whether or not such contest is for a prize). This warranty does not include coverage for police or taxi vehicles, race vehicles, or vehicles used for government or commercial purposes. Also excluded from this warranty are sales outside of the United States of America.

Installation of most suspension products will raise the center of gravity of the vehicle and will cause the vehicle to handle differently than stock. It may increase the vehicle's susceptibility to a rollover, on road and off road, at all speeds. Extreme care should be taken to operate the vehicle safely at all times to prevent rollover or loss of control resulting in serious injury or death.

FTS makes every effort to ensure suspension product compatibility with all vehicles listed in the catalog, but due to unknown auto manufacturers production changes and/or inconstancies by the auto manufacturer,

FTS cannot be responsible for 100% compatibility, including the fitment of tire and wheel sizes listed. The Tire and Wheel sizes listed in FTS's catalog are only a guideline for street driving with noted fender trimming. FTS is not responsible for damages to the vehicle's body or tires. FTS's obligation under this warranty is limited to the repair or replacement, at FTS option, of the defective product only. All costs of removal, installation or re-installation, freight charges, incidental or consequential damages are expressly excluded from this warranty. FTS is not responsible for damages and/or warranty of other vehicle parts related or non-related to the installed FTS product. This warranty is expressly in lieu of all other warranties expressed or implied. This warranty shall not apply to any product that has been subject to accident, negligence, alteration, abuse or misuse as determined by FTS.

FTS suspension components must be installed as a complete system including shocks as shown on our current website. All warranties will become void if FTS parts are combined and/or substituted with other aftermarket suspension products. Combination and/or substitution of other aftermarket suspension parts may cause premature wear and/or product failure resulting in an accident causing injury or death. FTS does not warrant products not manufactured by FTS.

Installation of FTS product may void the vehicles factory warranty; it is the consumer's responsibility to check with their local vehicle's dealer for warranty disposition before the installation of the product.

It is the responsibility of the distributor and/or the retailer to review all warranties and warnings of FTS products with the consumer prior to purchase. FTS reserves the right to supersede, discontinue, change the design, finish, part number and, or application of parts when deemed necessary without written notice. FTS is not responsible for misprints or typographical errors within the catalog or price sheet.

Full Throttle Suspension has a no refund return policy. Under special circumstances, returns might be accepted with prior written approval. All returned product will be shipped freight prepaid. Product returned is subject to a 40% restocking fee. No returns will be accepted after 30 days upon receipt of product.



Installation Picture Of Spacer Installed



**Driver Side Upper Control Arm Installed**