



4331 EUCALYPTUS AVE. ~~ CHINO, CA 91710
909-597-7800 Fax 909-597-7185
1999 FORD F-250/350 SUPER DUTY 4 WHEEL DRIVE
FTS422 8" LIFT BOX KIT (MODELS BUILT BEFORE 3/99)

PARTS LIST:

1 EA. TRACK ARM DROP BRKT. FT420-100	1 EA. DROP PITMAN ARM FT309
2 EA. SWAY BAR END LINKS FT422-8	4 EA. FRONT U-BOLTS FT350U
8 EA. SWAY BAR END LINK BUSHINGS FT1004	2 EA. 4.5" FRONT BUMPSTOP FTS89
1 EA. 9/16" NYLOCK NUTS	2 EA. 9/16" SAE WASHERS
1 EA. 9/16" X 3 1/2" BOLT	4 EA. 1/2" SAE WASHERS
2 EA. 12MM X 70 1.75 BOLTS	2 EA. 12MM 1.75 NYLOCK NUTS
2 EA. 3/8" NYLOCK NUTS	2 EA. 3/8" SAE WASHERS
4 EA. 12MM BUSHING SLEEVES FT404739	1 EA. COTTER PIN
1 EA. 9/16 HARDWARE	

TOOL LIST:

FLOOR JACK
JACK STANDS
ASSORTED METRIC AND S. A. E. WRENCHES AND SOCKETS
WHITE LITHIUM GREASE

CHECK ALL PARTS INCLUDED IN THIS KIT TO THE PARTS LIST ABOVE BEFORE BEGINNING INSTALLATION OF THE KIT. IF ANY PIECES ARE MISSING, CONTACT FABTECH AT 909-597-7800

CHECK THE FACTORY PITMAN ARM SPLINE ORIENTATION WITH THE SUPPLIED PITMAN ARM BEFORE BEGIN INSTALLATION. SEE STEP 4 FOR MORE INFORMATION.

READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION.

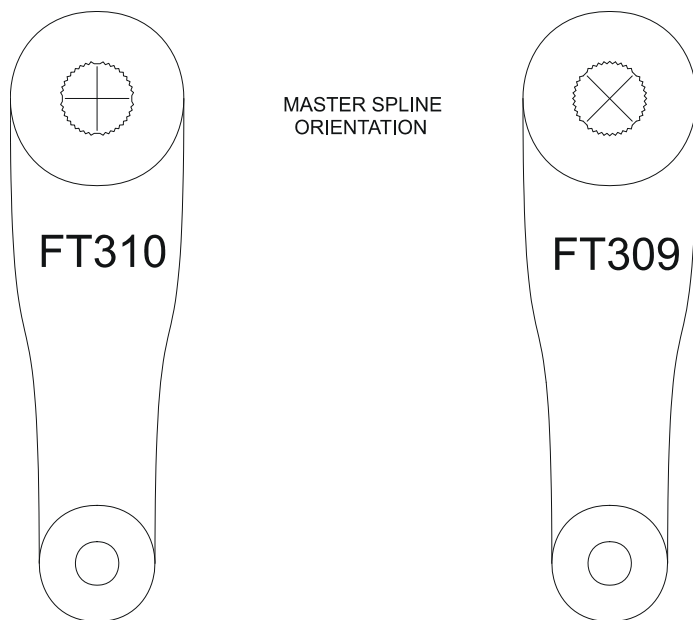
THIS KIT MUST BE INSTALLED WITH THE FTS278 FRONT LEAF SPRINGS, FTSBK4, FTS728 & FTS208 (BLOCKS, ADD A LEAFS AND U-BOLTS) OR FTS280 LEAF SPRINGS, FTS7333 FRONT SHOCKS AND FTS7266 REAR SHOCKS.

THE FRONT DRIVESHAFT MUST BE LENGTHENED AND MODIFIED DURING THE INSTALLATION OF THIS KIT. THERE ARE PICTURES INCLUDED IN THIS INSTRUCTION SHEET THAT SHOW THE MODIFICATIONS THAT MUST BE PERFORMED.

INSTRUCTIONS:

|

1. Disconnect the negative terminal on the battery. Jack up the front end of the truck and support the frame, at the front frame rails, with jack stands. **NEVER WORK UNDER AN UNSUPPORTED VEHICLE.** Remove the front tires.
2. Remove the brake calipers and tie them up out of the way. **DO NOT ALLOW THE CALIPERS TO HANG FROM THE BRAKE LINES!** Remove the bolt securing the brake line mounting tab to the frame, save the bolt, you will reuse it later. Supporting the front axle with two floor jacks, remove the front shocks and the sway bar end links. Remove the cotter pin and castle nut from the drag link at the pitman arm. Using a tie rod puller, separate the tie rod end from the pitman arm. Remove the bolt from the top end of the track bar, where it connects to the frame bracket. Remove the three bolts securing the track bar bracket to the frame and set the bracket aside.
3. Remove the bolts securing the front drive shaft to the axle yoke. Tape the bearing caps on the front u joint and remove the drive shaft from the transfer case. Remove all four u bolts from the front axle. Slowly lower the two floor jacks supporting the front axle to clear the leaf springs. Loosen the four front leaf spring shackle bolts, **DO NOT REMOVE THEM.** While supporting the leaf spring, remove the front bolt followed by the rear bolt, separating the leaf spring from the shackle. Set the leaf spring aside and repeat this step on the opposite leaf spring.
4. Remove the nut securing the original pitman arm to the steering box shaft. A pitman arm puller must be used to remove the pitman arm from the steering shaft. Using the diagram shown above, confirm that the master spline orientation on your factory pitman arm matches the one on the FT309 pitman arm supplied with this kit. If they do not match, you will need to purchase a FTS310 replacement pitman arm. Align the master splines on the steering shaft, replace the original washer and nut and torque the new unit in place at 200-225 ft.-lbs. **SEE DIAGRAM AND PHOTO BELOW**



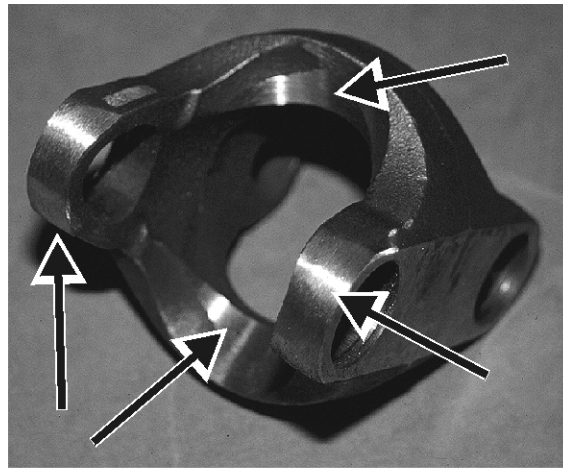
5. Place the supplied track bar drop bracket in position where the original bracket was. Reinstall the three original bolts and torque to 30 ft/lbs. Remove the front bumpstops from the frame. Install the new 4.5" bumpstops using the factory center hole and the supplied 3/8" flat washers and nylock nuts. **SEE PHOTOS BELOW.**



6. Slide one of the new leaf springs into the spring hanger, the double rapped bushing end will go towards the front. Reinstall the factory bolts and nuts but do not fully torque. Repeat this with the opposite leaf spring. Raise the floor jacks supporting the front axle, aligning the center pins on the leaf springs with the holes in the front axle spring pads, until the spring pad are fully seated on the leaf springs and the front springs compress 1/4". Slide the new u bolts over the leaf spring and through the original spring plates. Place a new washer and nut on each u bolt. Torque the u bolts in a "X" pattern to 60 ft/lbs.
7. Attach the drag link to the drop pitman arm, torque the original nut to 60 ft/lbs followed by the proper amount to line up a cotter pin hole. **DO NOT LOOSEN THE NUT TO LINE UP THE COTTER PIN HOLE.** Install a new cotter pin. Install both front shocks (or follow the instructions supplied with the FTS420-50 dual shock system) and reinstall the brake calipers.
8. Put the front tires back onto the axle and fully torque the lugs. Factory lug nut torque specification can be found in your owners manual. Raise the jacks supporting the front axle enough to release the jack stands from the front frame rails and set the truck back onto the ground. Steer the truck fully in each direction, making sure the front brake lines will not come in contact with the front tires. Make sure the 4.5" bumpstops are centered with the leaf springs.
9. Torque the front u bolts to 80-85 ft/lbs. Raise the front track bar to align it with the front track bar drop bracket. Insert the supplied 9/16" bolt with a 9/16" flat washer, from the rear of the drop bracket. Place the new 9/16" nut and flat washer on the end of the bolt and torque to 75 ft/lbs. Torque all the spring bolts, including the frame to shackle bolts to 75 ft/lbs.
11. Take the new sway bar end links, put a small amount of grease into each end and press the supplied urethane bushings into them. Grease the inside of the bushings and press a 12mm sleeve into each end. Install the new end links in place of the original units. The longer straight section of the link should be at the bottom. Use the original hardware for the connection to the OEM sway bar and use the supplied 12mm hardware on the upper connection to the frame. Torque all the sway bar hardware to 35 ft/lbs. Reinstall the front driveshaft using the original hardware. Torque all hardware to factory specs.
12. Check the torque on all fasteners and adjust the drag link to center the steering wheel. Drive the truck 1-2 miles and retorquer all nuts, bolts, and lugs. Recenter the steering wheel if necessary.
13. Install the rear block kit and shocks at this time.
14. Check front-end alignment and set to factory specifications. Re-adjust headlights.



Before

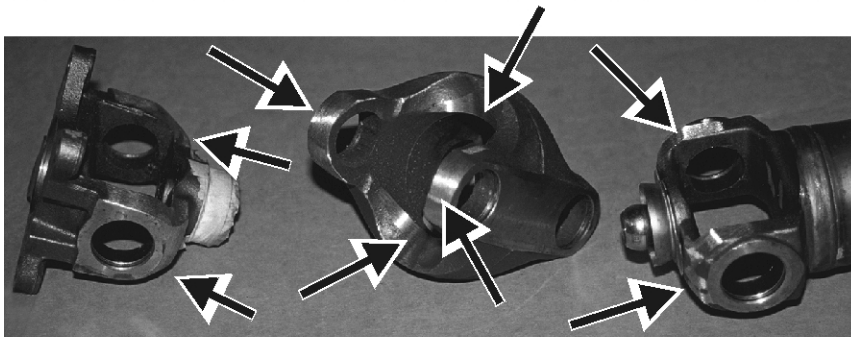


After

Both side of the H Yoke Must be cleared.



Before



After

Remove material as shown in areas marked with arrows.

FACTORY FORD PITMAN ARM PART NUMBERS

FTS309 = F81A-3590-LC **ALL HAVE 32 TEETH**
 F81A-3590 BA
 F81Z- 3590 LB

FTS310 = YC3Z-3590 CA **36 TEETH**

FTS311 = YC3Z-3590 DA **ALL HAVE 36 TEETH**
 YC35-3590 DB
 YC34-3590 DA

RETORQUE ALL NUTS, BOLTS AND LUGS AFTER 50 MILES AND PERIODICALLY THEREAFTER.

For technical assistance call: 909-597-7800

Product Warranty and Warnings-

Fabtech 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 Fabtech 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.

Take apart 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.

Fabtech does not warrant any product for finish, alterations, modifications and/or installation contrary to Fabtech's instructions. Alterations to the finish of the parts including but not limited to painting, powdercoating, 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.

Fabtech 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. Fabtech front end Desert Guards may impair the deployment or operation of vehicles equipped with supplemental restraining systems/air bag systems and should not be installed if the vehicle is equipped as so.

Fabtech 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 inconsistencies by the auto manufacturer, Fabtech cannot be responsible for 100% compatibility, including the fitment of tire and wheel sizes listed. The Tire and Wheel sizes listed in Fabtech's catalog are only a guideline for street driving with noted fender trimming. Fabtech is not responsible for damages to the vehicle's body or tires.

Fabtech's obligation under this warranty is limited to the repair or replacement, at Fabtech 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. Fabtech is not responsible for damages and/or warranty of other vehicle parts related or non related to the installed Fabtech 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 Fabtech.

Fabtech suspension components must be installed as a complete system including shocks as shown in our current catalog. All warranties will become void if Fabtech 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. Fabtech does not warrant products not manufactured by Fabtech.

Installation of Fabtech 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 Fabtech products with the consumer prior to purchase.

Fabtech reserves the right to supercede, discontinue, change the design, finish, part number and, or application of parts when deemed necessary without written notice. Fabtech is not responsible for misprints or typographical errors within the catalog or price sheet.

Instruction Sheet Part #- FT422i

11/20/07AM