



4331 EUCALYPTUS AVE. ~~ CHINO, CA 91710

909-597-7800 Fax 909-597-7185

2000-2004 FORD F-250/350 SUPER DUTY 4 WHEEL DRIVE

2000-2005 FORD EXCURSION 4 WHEEL DRIVE

FTS421-1 5.5" & 8" LIFT BOX KIT

	FTS421-1	BOX KIT
Qty	Part #	Description
1	FT423-100	TRACK ARM BRKT.
4	FT352U	U-BOLTS
1	FT30331	HDWR SUB-ASSEMBLY KIT
1	FT310	PITMAN ARM
2	FTS89	4.5" BUMPSTOP
2	FT422-8	SWAY BAR ENDLINKS

	FT30331	Hdwr Sub-Assembly Kit
Qty	Part #	Description
1	FT916H	HARDWARE PACK
8	FT1004	SWAY BAR BUSHINGS
2	FT97150-6-106	3/8" SWAY BAR SPACERS
2	FT421-1i	INSTRUCTIONS FTS421-1
4	50000005152	1/2" USS WASHERS
2	37000005052	3/8" SAE WASHERS
6	43000005152	7/16" USS FLAT WASHERS
4	FT404739	12MM SLEEVES
2	37160003052	3/8" -16 NYLOCK NUTS
1	12002007000	COTTER PIN
1	FTAS16	Driver Warning
1	FTAS12	Fabtech Sticker
1	FTREGCARD	Reg. Card

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.

CHECK PARTS & HARDWARE AGAINST THE PARTS LIST BEFORE BEGINNING THE INSTALLATION TO ASSURE THE KIT IS COMPLETE, CONTACT FABTECH @ 909-597-7800 IF KIT IS INCOMPLETE.

NOTE: ONLY THE 5.5" LIFT IS APPROVED FOR THE EXCURSION AND MUST USE FTS281 REAR LEAF SPRINGS.

5.5" LIFT NOTE:

THIS KIT MUST BE INSTALLED WITH THE FTS275 FRONT LEAF SPRINGS, REAR BLOCK KIT, FTS7265 FRONT SHOCKS AND FTS7266 REAR SHOCKS.

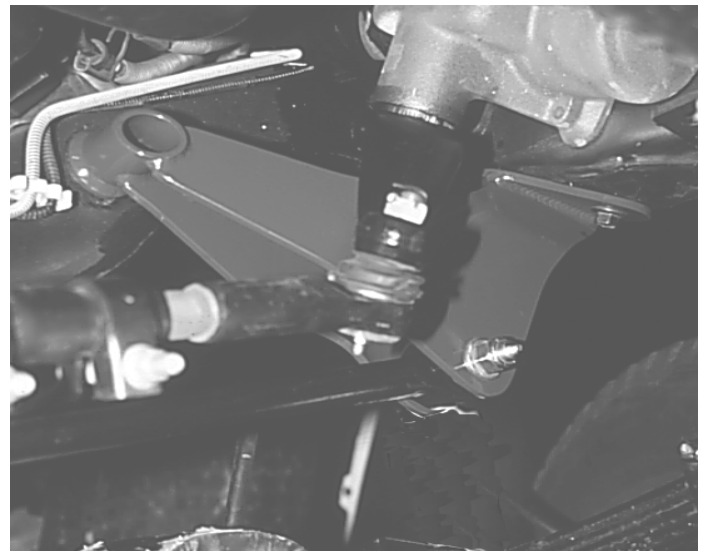
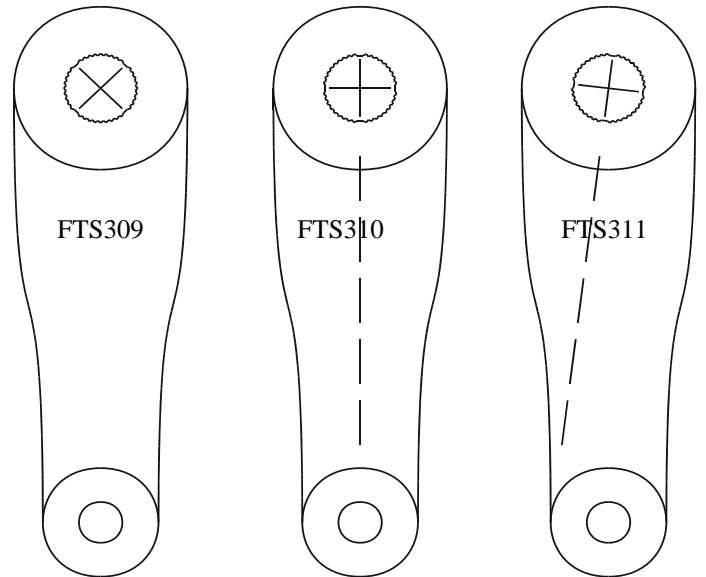
8" LIFT NOTE:

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.

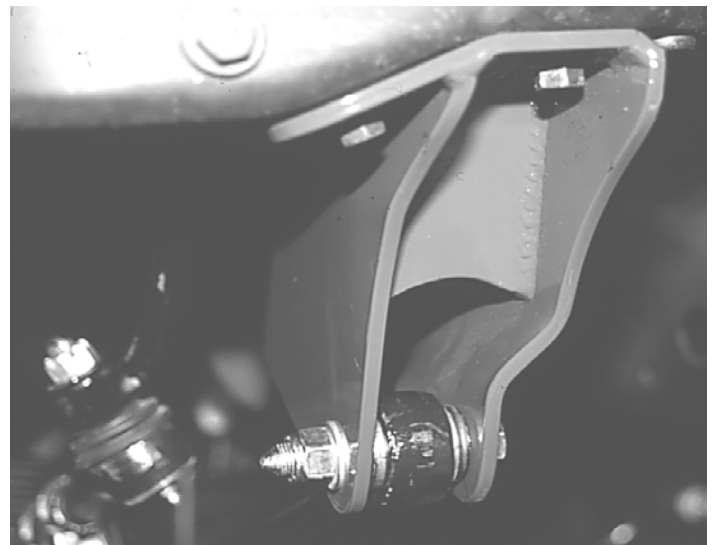
THE FRONT DRIVESHAFT MUST BE LENGTHENED AND MODIFIED DURING THE INSTALLATION OF THIS KIT. THERE ARE PICTURES INCLUDED IN THIS INSTRUCTION SHEET THAT SHOW THE MODIFICATIONS THAT MUST BE PERFORMED.

5.5" LIFT 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!** 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 and washer from the steering shaft at the pitman arm. Using a pitman arm puller, remove the factory pitman arm. Using the diagram shown BELOW, confirm that the master spline orientation on your factory pitman arm matches the one on the FT310 pitman arm supplied with this kit. If they do not match, you will need to purchase the correct replacement pitman arm. Slide the new drop pitman arm onto the splines of the steering shaft making sure to align the master splines. Reinstall the factory lock washer followed by the nut and torque to 200 ft/lbs. SEE DIAGRAM AND PHOTO IN NEXT COLUMN.



5. Place the supplied track bar drop bracket in position where the original bracket was. Reinstall the three original bolts and torque to 100 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 PHOTO ON NEXT PAGE.



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 ¼". 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 184 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 owner's 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 179 ft/lbs. Raise the front track bar to align it with the front track bar drop bracket. Insert the original bolt, from the rear of the drop bracket, using the upper bolt hole in the bracket. Place the original nut on the end of the bolt and torque to 369 ft/lbs. Torque the front spring pivot bolts to 125 ft lbs and the rear spring pivot bolts to 109 ft lbs.
10. 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 along with the supplied 7/16" washers for the connection to the OEM sway bar. Torque all the sway bar hardware to 35 ft/lbs. Reinstall the front drive shaft using the original hardware. Torque to factory specs.
11. 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.

REAR LIFT FOR 5" KIT

12. Jack up the rear end of the vehicle and support the frame rails with jack stands. Supporting the rear differential remove and discard the rear shocks and u bolts. Lower axle down slowly. Use care not to over extend the brake hose

13. Excursions must use FTS281 replacement rear springs and discard the factory rear lift blocks.

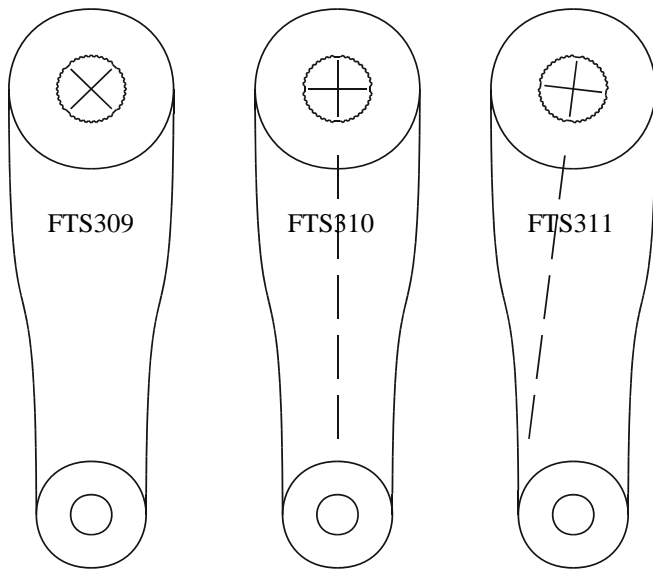
14. Locate and install the rear lift blocks (not included in this kit), the factory block will be positioned on top of the new Fabtech block, with the short center pin of both blocks facing down, to the axle. The short end of the blocks should face to the front of the vehicle. Using the U bolts (not included in this kit), nuts and washers align axle, lift blocks, and springs and torque U Bolts to 179 ft-lbs. **Note: Due to the large number of rear factory optional tow packages offered on the Super Duty, you may need to remove the factory over load leaf for proper fitment of the block, add-a-leaf, and u-bolt combination. Fabtech offer two rear u-bolt lengths, FTS351UBK 12" in length and FTS728 16 ½" in length**
15. Install Fabtech shock part number FTS7266 (not included) with the factory hardware and torque bolts to 65lbs.
16. Recheck all bolts for proper torque. Recheck brake hoses and lines for proper clearances.
17. Check front end alignment and set to factory specifications. Readjust headlights

8" LIFT INSTRUCTIONS:

1. 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.

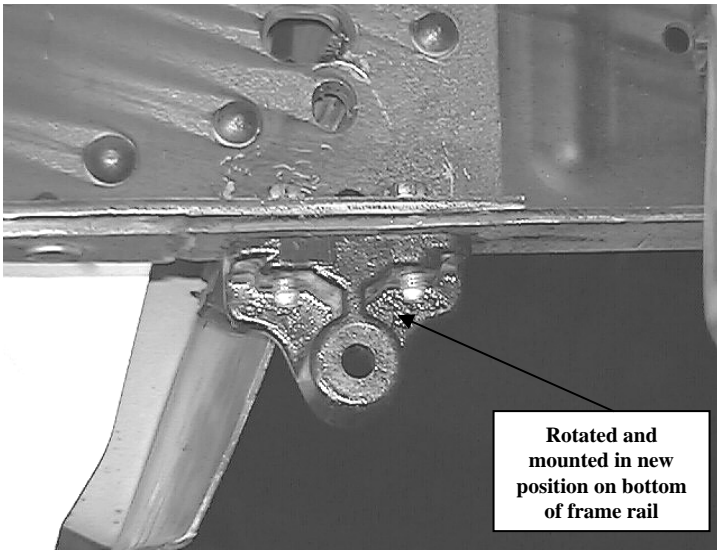
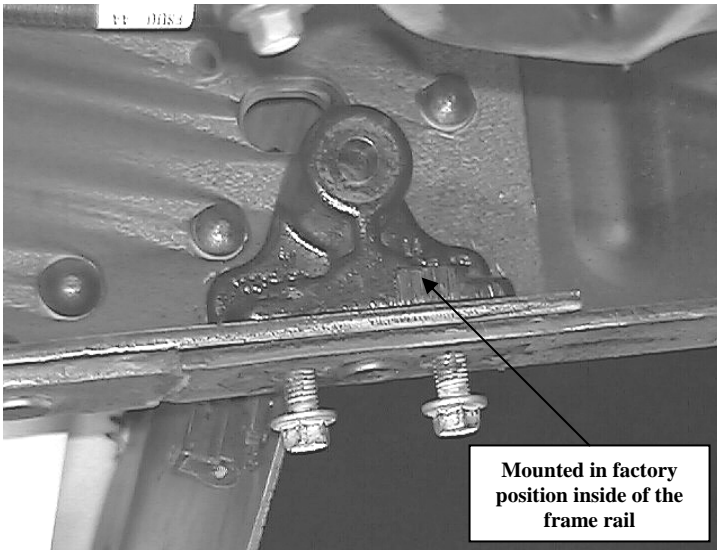
3. Remove the bolts securing the front drive shaft to the axle yoke. Tape the bearing caps on the front u joint and remove the drive shaft from the transfer case. Remove all four u bolts from the front axle. Slowly lower the two floor jacks supporting the front axle to clear the leaf springs. Loosen 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 and washer from the steering shaft at the pitman arm. Using a pitman arm puller, remove the factory pitman arm. Using the diagram shown above, confirm that the master spline orientation on your factory pitman arm matches the one on the FT310 pitman arm supplied with this kit. If they do not match, you will need to purchase the correct replacement pitman arm. Slide the new drop pitman arm onto the splines of the steering shaft making sure to align the master splines. Reinstall the factory lock washer followed by the nut and torque to 200 ft/lbs. SEE DIAGRAM AND PHOTO ON NEXT PAGE.



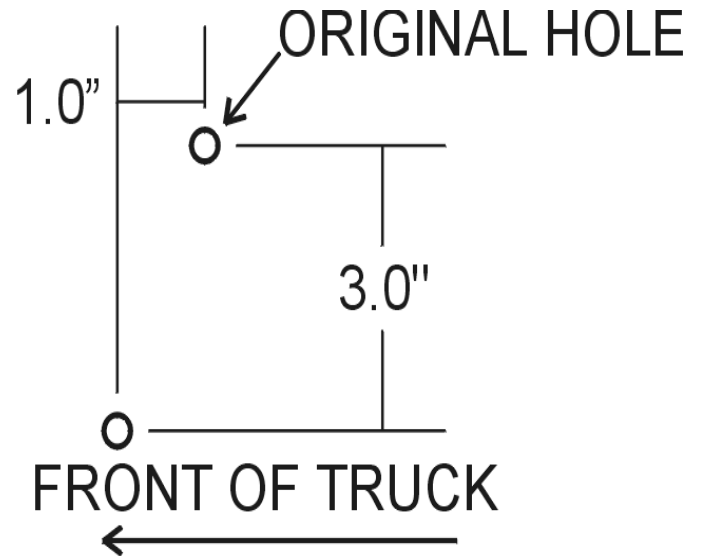
5. Place the supplied track bar drop bracket in position where the original bracket was. Reinstall the three original bolts and torque to 30 ft/lbs. Remove the front bumpstops from the frame. Install the new 4.5" bumpstops using the factory center hole and the supplied 3/8" flat washers and nylock nuts.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



6. Remove the 2 bolts securing the factory upper sway bar link mount. Relocate the mount underneath the frame using the original bolts. Tighten both bolts to factory specs. Repeat this on the opposite side of the truck. SEE PHOTOS BELOW.



7. 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 $\frac{1}{4}$ ". 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 184 ft/lbs.
8. 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.
9. You will now relocate the upper brake line mounting tab. Mark a spot on the frame 3" below and 1" towards the front of the frame from the original hole. Drill a new $\frac{1}{4}$ " hole and reinstall the original bolt. SEE DIAGRAM BELOW.



10. Put the front tires back onto the axle and fully torque the lugs. Factory lug nut torque specification can be found in your owner's 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" bump stops are centered with the leaf springs.
11. Torque the front u bolts to 179 ft/lbs. Raise the front track bar to align it with the front track bar drop bracket. Insert the original bolt, from the rear of the drop bracket, using the lower bolt hole in the bracket. Place the original nut on the end of the bolt and torque to 100 ft/lbs. Torque all the spring bolts, including the frame to shackle bolts to 75 ft/lbs.
12. 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 onto the relocated sway bar mounts using the original hardware, with a $\frac{7}{16}$ " flat washer on each side of the urethane bushing. Place the supplied $\frac{3}{8}$ " spacer in between the flat washer and the mount as shown above. The longer straight section of the link should be at the bottom. Reattach the end link to the sway bar with a $\frac{7}{16}$ " flat washer on the outside of the urethane bushing. Torque all the sway bar hardware to 35 ft/lbs. SEE PHOTOS ON NEXT PAGE.

BLOCK AND ADD-A-LEAF INSTRUCTIONS

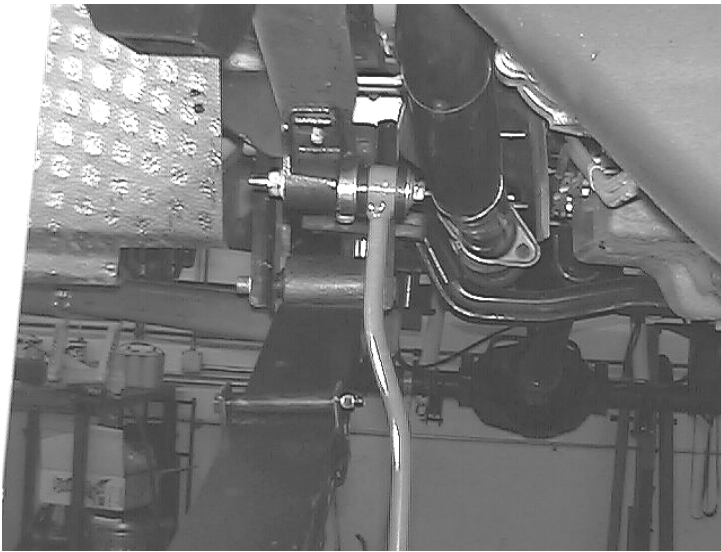
16. Clamp the leaf spring in the middle of the spring and remove the center bolt.
17. Separate the individual leafs and install the provided add a leafs with the new center bolt in a pyramid pattern smallest on the bottom graduating to the longest on top. The factory flat overload leaf should remain on the bottom of the pack. Clamp the spring and tighten the center bolt as not to leave a gap between the springs. Cut the thread of the bolt smooth with the nut. The nut should be on the top of the leaf spring pack.
18. Locate and install the rear lift blocks (not included in this kit), the factory block will be positioned on top of the new Fabtech block, with the short center pin of both blocks facing down, to the axle. The short end of the blocks should face to the front of the vehicle. Using the U bolts (not included in this kit), nuts and washers align axle, lift blocks, and springs and torque U Bolts to 179 ft-lbs. **Note: Due to the large number of rear factory optional tow packages offered on the Super Duty, you may need to remove the factory over load leaf for proper fitment of the block, add-a-leaf, and u-bolt combination. Fabtech offer two rear U-bolt lengths, FTS351UBK 12" in length and FTS728 16 1/2" in length.**

REPLACEMENT LEAF INSTRUCTIONS

19. If your truck is equipped with a factory over load leaf on top of the factory leaf spring pack you will need to remove and discard the overload leaf.
20. Locate the new FTS281 rear leaf springs (not included in this kit) and install into the factory position using factory hardware. You will reuse the factory u-bolts and shackle and hanger hardware. **Note: the factory block in the truck will be reused in the factory location.**

ALL APPLICATIONS

21. Install Fabtech shock part number FTS7266 (not included) with the factory hardware and torque bolts to 65lbs.
22. Recheck all bolts for proper torque. Recheck brake hoses and lines for proper clearances.
23. Install tires and wheels and torque lug nuts to wheel manufacturer's specifications. Turn front tires left to right and check for appropriate tire clearance. Note- Some oversized tires may require trimming of the front bumper & valance.
24. Check front end alignment and set to factory specifications. Readjust headlights.
25. **RETORQUE ALL NUTS, BOLTS AND LUGS AFTER 50 MILES AND PERIODICALLY THEREAFTER.**
For technical assistance call: 909-597-7800



13. While you are **lengthening the front drive shaft** perform the modifications as shown on page 4. After all modification are complete, reinstall the drive shaft and torque all original hardware to factory specs.
14. Check the torque on all fasteners and adjust the drag link to center the steering wheel. Drive the truck 1-2 miles and retorque all nuts, bolts, and lugs. Center the steering wheel if necessary.

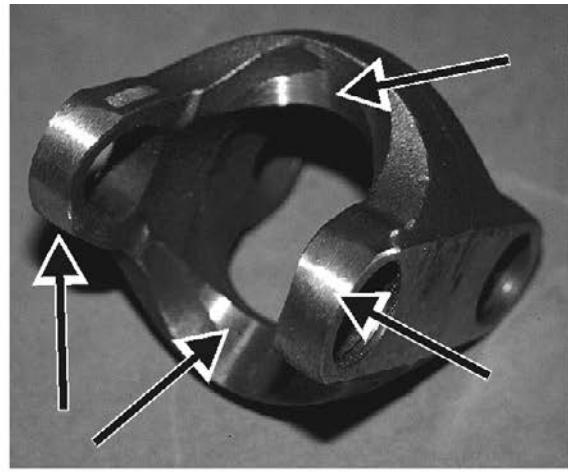
REAR LIFT OPTIONS FOR 8" KIT

Fabtech offers two rear lift options for the Super Duty 8" lift., Block and add-a-leaf combination or replace rear leaf springs. Follow the instructions below for the option being installed.

15. Jack up the rear end of the vehicle and support the frame rails with jack stands. Supporting the rear differential, remove and discard the rear shocks and u bolts. Lower axle down slowly. Use care not to over extend the brake hose.



Before

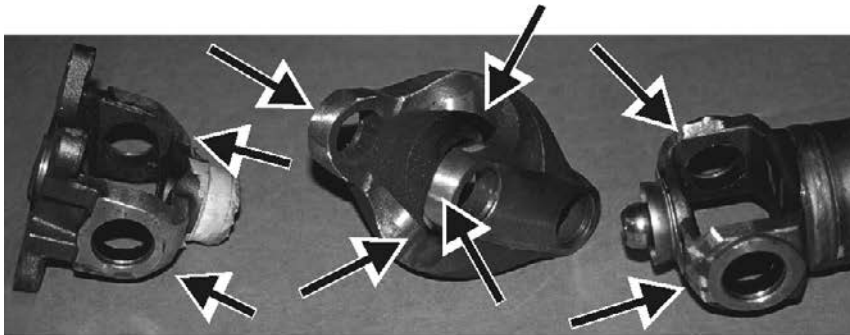


After

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

- 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 and driveshafts. 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.

Dirt Logic and Performance Coilover 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, 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.

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 on the website, but due to unknown auto manufacturer's 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 website 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 is not responsible for premature wear of factory components due to the installation of oversized tires and wheels.

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 on our website. 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.

Depending on the condition of the factory suspension components retained after the installation of a Fabtech suspension not all vehicles may have the same ride stance front to rear as described in the website. The blue color of suspension components shown in all Fabtech photographs are for display purposes only. Majority of all Fabtech components will be black specifically where noted with part numbers ending in BK.

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. Some state laws may prohibit modification of suspension to a vehicle in whole or in part. It is the responsibility of the installer and consumer to consult local laws prior to the installation of any Fabtech suspension product to comply with such written laws.

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 super cede, 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 website or price sheet. For the most recent Product Warranty and Warnings visit our website www.fabtechmotorsports.com