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1997-2003 FORD F150 / 1997-2002 EXPEDITION 2 WHEEL DRIVE
2001-2003 FORD F150 SUPERCREW 2 WHEEL DRIVE
FTS97159-7 3.5" LIFT SPINDLES

PARTS LIST:

FTS97159-7		F150 3" Lift Spindle		FT30370		Hdwr Sub-Assembly Kit	
Qty	Part #	Description	Qty	Part #	Description	Qty	Description
1	FT30370	Hdwr Sub-Assembly Kit	8	12002007000	Cotter Pin 1/8" X 2"		
1	FTS97159-7D	Spindle Driver	6	12008007100	8" Zip Tie		
1	FTS97159-7P	Spindle Passenger	8	25000005052	1/4" SAE Flat Washer		
			2	25000005252	1/4" Split Lock Washer		
			3	25200003052	1/4"-20 Nylok Nut		
			2	25200751052	1/4"-20 X 3/4" Hex Bolt		
			1	25201001081	1/4"-20 X 1" Hex Bolt		
			2	25201251081	1/4"-20 X 1 1/4" Hex Bolt		
			2	FT97159-7-101	BJ Ring Spacer		
			2	FT97159-7i	Instruction Sheet		
			1	FTAS12	Sticker		
			1	FTAS16	Driver Warning Decal		
			3	FTCLAMP	3/8" X 1/2" Adel Clamp		
			1	FTREGCARD	Registration Card		

TOOL LIST: (NOT INCLUDED)

FLOOR JACK AND JACK STANDS

ASSORTED METRIC AND S.A.E SOCKETS, & ALLEN WRENCHES

READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION! IF THESE INSTRUCTIONS ARE NOT PROPERLY FOLLOWED, SEVERE FRAME, SUSPENSION AND TIRE DAMAGE MAY RESULT TO THE VEHICLE.

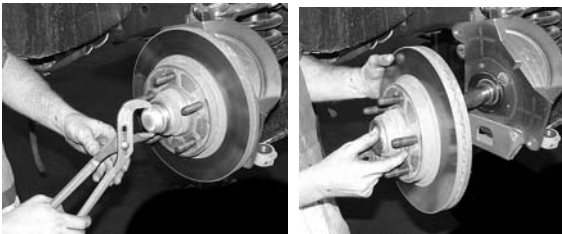
VEHICLES THAT WILL RECEIVE OVERSIZED TIRES SHOULD CHECK BALL JOINTS, TIE RODS ENDS AND IDLER ARM EVERY 2500-5000 MILES FOR WEAR AND REPLACE AS NEEDED.

INSTRUCTIONS:

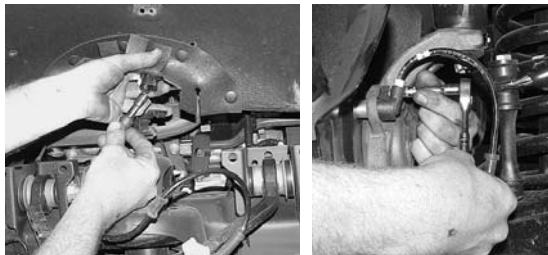
1. Disconnect the negative terminal on the battery. Jack up the front end of the truck and support the frame rails with jack stands. **NEVER WORK UNDER AN UNSUPPORTED VEHICLE!**



2. Starting on the passenger's side, remove the front tire. Remove the 2 bolts securing the brake caliper assembly to the spindle. Tie the brake caliper to the frame. **DO NOT ALLOW THE BRAKE CALIPER HANG FROM THE RUBBER HOSE!**



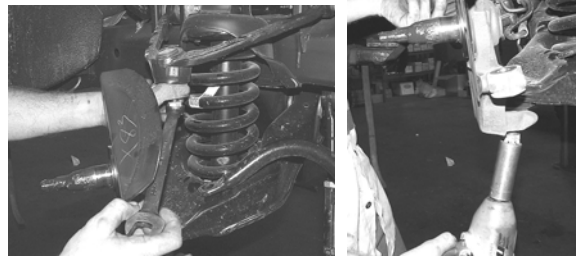
3. Remove the dust cap from the brake rotor, the cotter pin and spindle nut. Slide the rotor off of the spindle. Keep the outer bearing inside the rotor.



4. Locate the Antilock Brake System (ABS) sensor wire inside the inner fender and separate the 2 connectors. Separate the wire from the keepers on the shock and upper control arm (UCA). Remove the bolt securing the ABS sensor to the spindle. Set the sensor aside.



5. Remove the cotter pin and castle nut securing the tie rod end to the spindle. Use a ball joint puller to separate the tie rod end from the spindle.



6. Support the lower control arm (LCA) with a floor jack. Raise the lower control arm enough to relieve some of the tension on the shock absorber. Remove the cotter pins from the upper and lower ball joints. Remove the castle nuts securing the upper and lower ball joints to the spindle. Discard Spindle along with dust shield.



7. Use a ball joint puller to separate the spindle from the ball joints and set the spindle assembly aside.



8. Remove the snap ring from the top of the lower ball joint. Place one FT97159-7-101 shim over the ball joint and replace the snap ring on the lower ball joint, making sure the snap ring is fully seated in the groove.



9. Take the passenger's side lift spindle and slide it onto the upper and lower ball joints. Reinstall the original castle nuts. Torque the castle nuts to factory

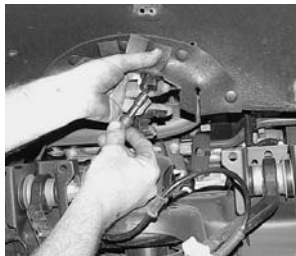
specifications and install 2 of the supplied new cotter pins. Grind lip 1/8" on (LCA) to clear spindle.



10. Lubricate the end of the spindle with high temp disc brake grease and slide the rotor back onto the spindle end. If the front wheel bearings need to be repacked, do it at this time. Reinstall the spindle nut and tighten it enough to remove all bearing play. The spindle should still rotate freely. Once you have set the proper tension, install one of the new cotter pins and reinstall the dust cap.



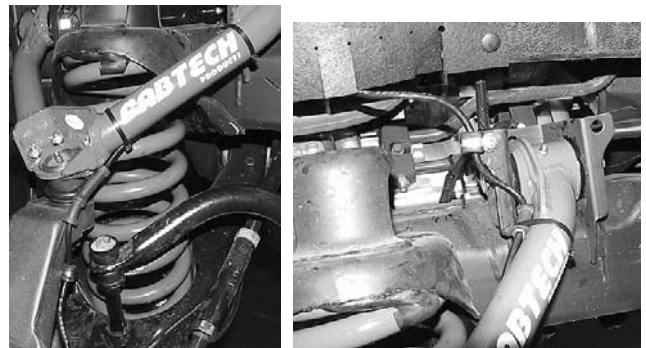
11. Slide the tie rod end into the spindle and torque the castle nut to factory specs. Install a new cotter pin. Slide the brake caliper assembly onto the spindle and reinstall the 2 original bolts. Torque to 80 ft. lbs.



12. Route the ABS sensor wire onto the UCA the same way it was removed. Reattach the wire to the UCA and shock keepers. Reconnect the wire behind the inner fender. You may have to slide the rubber insulators on the sensor wire to relocate them in the clamps. You may have to use some light oil to aid in moving the insulators.



13. Slide one of the supplied adel clamps around the ABS wire. Place a 1/4" lock washer, followed by a 1/4" flat washer on one of the 1/4" X 3/4" bolts and attach the adel clamp to the inside of the lift spindle. With the brake line routed straight up the spindle tighten the clamp to 3 ft/lbs.
14. If you are replacing the front shock or installing a Fabtech 3.5" suspension system with this kit, do so at this time.
15. Repeat steps two through fifteen on the opposite side of the truck.
16. With both sides of the truck completely finished and the truck still off the ground, cycle the steering left to right from stop to stop. Make sure there is plenty of clearance between the ABS line and all other components.
17. Reinstall the tires onto the truck and torque the lugs to factory specifications, which can be found in the owners manual. Set the truck back on the ground and cycle the steering left to right from stop to stop. Make sure there is plenty of clearance between the ABS line and all other components.
18. If you installed this lift spindle system with a Fabtech 3.5" suspension system you will need to perform the following steps.



19. Secure the ABS wire to the front upper control arm mount using one of the supplied adel clamps, 1/4" X 1" bolts, 1/4" lock nuts and 1/4" flat washers. Use the included cable ties to secure the ABS wire to the UCA.
20. Drive the truck for several miles and recheck all clearances. Also check for any play in the front wheel bearings.
21. Check front-end alignment and set to factory specifications. Re-adjust headlights.

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.

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