



[www.fabtechmotorsports.com](http://www.fabtechmotorsports.com)

**1000 BEACON STREET ~ BREA, CA 92821**  
**714-990-8850 FAX 714-990-8854**  
**1997-2000 FORD F150/EXPEDITION 2 WHEEL DRIVE**  
**2001 FORD F150 SUPERCREW 2 WHEEL DRIVE**  
**FTS97159-7 3.5" LIFT SPINDLES**

**PARTS LIST:**

- 1 EA. LIFT SPINDLE PASS. SIDE FTS97159-7P**
- 1 EA. LIFT SPINDLE DRIV. SIDE FTS97159-7D**
- 2 EA. 1/4"-20 X 3/4" GRADE 5 BOLTS**
- 2 EA. 1/4"-20 X 1 1/4" GRADE 8 BOLTS**
- 1 EA. 1/4"-20 X 1" GRADE 5 BOLTS**
- 8 EA. 1/4" SAE WASHERS**
- 2 EA. 1/4" LOCK WASHERS**
- 3 EA. 1/4" LOCK NUTS**
- 3 EA. #6 ADEL CLAMPS**
- 8 EA. COTTER PINS**
- 6 EA. CABLE TIES LARGE**
- 2 EA. LOWER BALL JOINT SHIMS FT97159-7-101**

**TOOL LIST: (NOT INCLUDED)**

- FLOOR JACK AND JACK STANDS**
- ASSORTED METRIC AND S.A.E SOCKETS, & ALLEN WRENCHES**

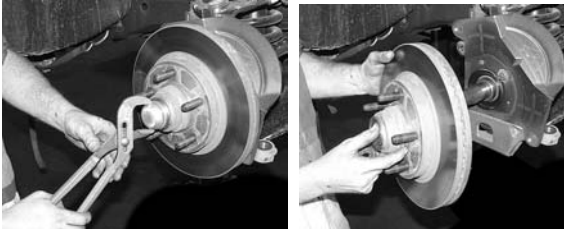
**READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION! IF THESE INSTRUCTIONS ARE NOT PROPERLY FOLLOWED, SEVERE FRAME, SUSPENSION AND TIRE DAMAGE MAY RESULT TO THE VEHICLE.**

## INSTRUCTIONS:

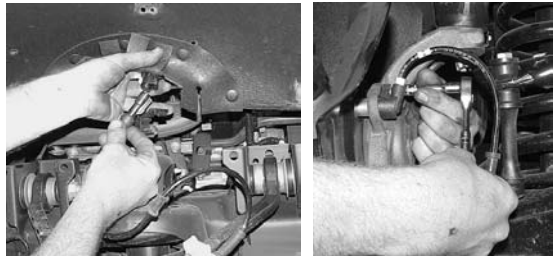
1. Jack up the front end of the truck and support the frame rails with jack stands. **NEVER WORK UNDER AN UNSUPPORTED VEHICLE!**



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!**



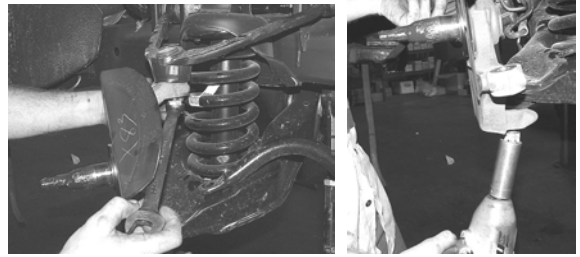
3. Remove the dust cap from the brake rotor, the cotter pin and spindle nut. Slide the rotor off of the spindle. Keep the outer bearing inside the rotor.



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.



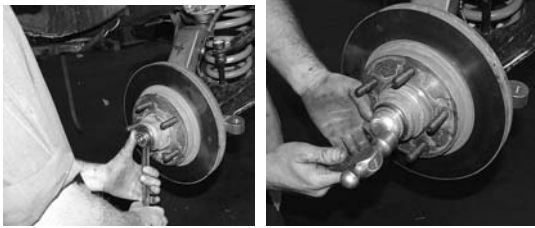
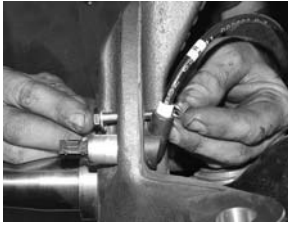
7. Use a ball joint puller to separate the spindle from the ball joints and set the spindle assembly aside.



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.



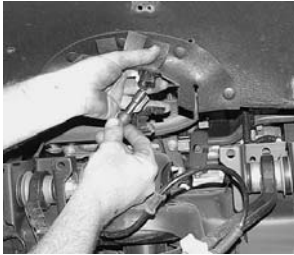
9. Take the passenger's side lift spindle and slide it onto the upper and lower ball joints. Reinstall the original castle nuts. Torque the castle nuts to factory specifications and install 2 of the supplied new cotter pins. Grind lip 1/8" on (LCA) to clear spindle.



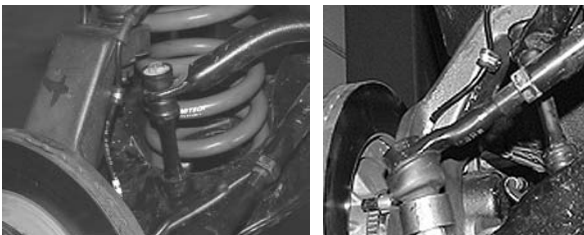
10. Lubricate the end of the spindle with high temp disc brake grease and slide the rotor back onto the spindle end. If the front wheel bearings need to be repacked, do it at this time. Reinstall the spindle nut and tighten it enough to remove all bearing play. The spindle should still rotate freely.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



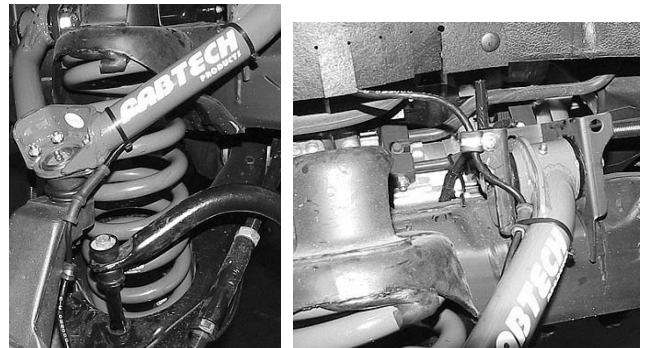
11. Slide the tie rod end into the spindle and torque the castle nut to factory specs. Install a new cotter pin. Slide the brake caliper assembly onto the spindle and reinstall the 2 original bolts. Torque to 80 ft. lbs.



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.

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

For technical assistance call: 714-990-8850

Fabtech Motorsports Suspension Products

Fabtech Motorsports warrants to the original retail purchaser who owns the vehicle on which the product was originally installed. Fabtech Motorsports does not warrant the product for finish, alterations, modifications and/or installation contrary to Fabtech Motorsports' instructions. Fabtech Motorsports suspension 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. Fabtech suspension products that increase the vehicle's ride height may greatly increase the risk of vehicle roll over. Vehicles should be operated in a safe manner at all times as not to cause a roll over or an accident resulting in injury or death. Fabtech Motorsports' obligation under this warranty is limited to the repair or replacement, at Fabtech Motorsports option of the defective product. Any and all costs of removal, installation or re-installation, freight charges, incidental or consequential damages are expressly excluded from this warranty. 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. Fabtech Motorsports does not warrant products not manufactured by Fabtech Motorsports. Please see Fabtech's Jobber Price Sheet for additional conditions and warnings.

Instruction Sheet Part #- FT97159-7i

04/03/02