



INSTALLATION INSTRUCTIONS

PART # FTS7645 4.5" Front Spring Hanger & Shackles without Shocks

PART # FTS764505 4.5" Front & Rear System without Shocks

2000-2004 Ford Super Duty 4wd Pickup

HARDWARE AND PARTS LIST (After March 99)

Component List	Qty
50-764501 Spring Hanger, 4.5" Left	1
50-764501R Spring Hanger, 4.5" Right	1
50-764502 Crossbar	1
50-764503 Spring Shackle 4.5"	2
FTSFD101 Track Bar Bracket 1	
FTSFD100 Pitman Arm 1	
FTS250BK 2.5" Lift Block Kit 2	
50-1011 Front Sway Bar Link 2	
50-1008 Center Carrier Support Spacer 1	
60-1000 Bushing & Sleeve Kit - (contains 1)	
MOO392BK01 5/8" Hourglass Bushings/Blk 4	
SLE104 Steel Sleeve 4	
70-7645 Hardware Kit - (contains 1)	
B12X1.25 1/2-13 X 1.25 Long Gr 8 Bolt 6	
N12MLN 1/2-13 Metal Lock Nut 6	
FW12 1/2 Sae Gr 8 Washer 12	
50-764504 Front Bumper Standoff Bracket 2	
B916X3.5 9/16 x 3.5 Gr 8 Bolt 1	
WTL916 9/16 Thick Load Washer 1	
Fw916 9/16 Flat Washer 1	
N916MLN 9/16 Metal Lock Nut 1	
50-1009 Sway Bar Link Bracket 2	

Component List	Qty
U-Bolts	
15-R145 5/8" x 3.5" x 14.5" Rear U-Bolt	4
60-3011 U-Bolt Hardware Kit - (contains 1)	
NH58 5/8" High nut	8
FWT58 5/8" Flat Washer	8
Installation Instructions	1
FTS Decals	2
FTS9991 Windshield Decal	1
Note: This kit will only fit vehicles after 3/1/99 Production	
<u>Installation requires a professional mechanic.</u>	
Prior to installation, carefully inspect the vehicles steering and drive line systems, paying close attention to the tie rod ends, pitman and idler arms, ball joints and wheel bearing pre-load. Also check steering-to-frame and suspension-to-frame attaching points for stress cracks. The overall vehicle must be in excellent working condition. Repair or replace worn parts.	
Please read entire instructions before attempting installation.	
Check the parts and hardware against the parts list to ensure that your kit is complete. Separating parts according to the areas where they will be used and placing the hardware with the brackets before you begin will save installation time. Secure and properly block vehicle prior to beginning installation. Always wear safety glasses when using power tools.	
<u>PLEASE NOTE</u>	
Tire and wheel is crucial in assuring proper fit performance and the safety of your Full-Traction Suspension equipped vehicle. For this application a wheel not to exceed 10" in width with a maximum backspacing of 3.5" must be used. Diameter of wheel may be any of the following 3 choices- 16", 16.5", 17". Any other diameter, either smaller or larger, will not be endorsed as acceptable by Full-Traction Suspension and will void any and all warranties, written or implied.	

BEFORE YOU BEGIN

1. Read the instructions and study the illustrations before attempting installation. Separating the parts according to the areas where they will be used and placing the hardware with the brackets before you begin will save installation time.
2. Check the parts and hardware against the parts list to assure that your kit is complete.
3. Always use jack stands when installing suspension components under the vehicle.
4. A pitman arm removal tool and tie rod separating tool are required to complete the installation.

FRONT DISASSEMBLY AND ASSEMBLY PROCEDURES

TECH TIP: Factory spring bolts are secured with loctite which make removal difficult. By warming the nut with a propane torch to approx. 300 degrees fahrenheit the loctite will release and the hardware can be removed with hand tools. (Have Fire Extinguisher handy whenever using open flame on or near any vehicle.

1. Position vehicle on a smooth, flat, hard surface (ie. Concrete or asphalt).
2. Block rear tires and set the parking brake.
3. Remove front bumper from vehicle.
4. Remove track rod bolt on driver side at the frame mount. **Fig 1.**
5. Raise front of vehicle and support with jack stands behind front spring.
6. Remove front tires on both sides.
7. Remove sway bar links on both sides. Save the factory 12mm bolts, to be used for reassembly.
8. On driver side, support front axle with floor jack. Remove shocks.
9. With the floor jack supporting the axle, remove the front bushing bolts followed by the rear bolts that connect the top of the shackles to the frame, separating the shackles from the frame. Leave the U-Bolts attached to the axle. Slowly lower the floor jack until the leaf spring clears the frame mounts. If 2 floor jacks are available, lower down the springs on both sides at the same time. Otherwise, work on one side at a time. Save factory hardware. Do not lower the axle more than the length of the brake lines. Remove brake calipers if necessary.
10. Remove all bolts (7) holding the factory spring hangers to the frame. Remove the factory spring hangers from the frame. Save factory hardware.
11. Place the new **Full-Traction spring hangers** onto the frame aligning holes on the bracket with the existing holes in the frame. Install using factory hardware. Spring hanger brackets are Left and Right. Install the cross brace between each spring hanger using supplied ½" bolts. Crossbar must be held in position between the spring hangers using the upper mounting bolt. Next, align the spring eye with the lower bolt hole in the spring hanger and install factory bolt. Fig.2

Tighten all hardware to secure the hangers to the frame. **Repeat same for opposite side. Fig.2 & 3**



Fig.1



Fig.2



Fig.3

12. Raise the floor jack(s) supporting the front axle and align the front eyelet of the leaf springs with the holes in the new hangers. Install the front leaf spring bolt through the bottom hole of the spring hanger. Install the new **Full-Traction shackle** on the rear of the front spring using factory bolts. Tighten all hardware. **Fig.4**



Fig.4

13. Install 50-764504 Bumper standoff bracket to the Hanger as shown in **Fig.5**

14. Remove factory cast track bar bracket on driver side. Save the bolts and pal nuts. Some will be reused.

15. Use a tie rod separator and a pitman arm puller to remove the pitman arm from the steering box.

16. Install new Full-Traction pitman arm. Torque to 185 lbs/ft.

17. Install new Full-Traction track bar bracket. Use existing bolts and pal nuts on frame and use new 9/16" x 3.5" bolt in cross member. Drill out frame hole to 9/16 as shown in **Fig.6**. Install 9/16" bolt from the rear of the vehicle with the plated load washer under the head of the bolt. The load washer when properly installed will be between the head of the bolt and the crossmember. Install a flat washer on the outside of the track bar bracket under the 9/16" nut. Torque bolt to 85 lbs/ft.

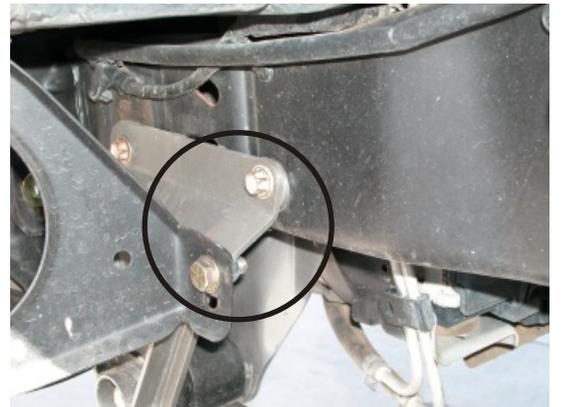


Fig.5

18. To install front sway bar link, invert the factory frame bracket and install 50-1009 sway bar link bracket as shown in **Fig.7**

19. Install shocks at this time.

20. Install tires

21. Install track rod into new track bar bracket. Torque to 115 lbs/ft. **Fig.6**



Fig.7

Invert factory bracket

Drill out hole to 9/16"



Fig.6

REAR DISASSEMBLY AND ASSEMBLY PROCEDURES

1. Block front tires and raise rear of vehicle. Support frame with jack stand forward of rear springs.
2. Remove tires and shocks on both sides.
3. Support rear axle with floor jack and remove u-bolts on driver side.
4. Remove the rear U-bolts holding the spring to the axle.
5. Install new lift blocks under the existing factory blocks. **Fig.8**
6. Raise axle to spring and secure with 5/8" U-Bolts supplied. .
7. Tighten u-bolts. Torque 5/8" U-bolts to 100 lbs/ft.
8. Install shocks.
9. Install tires and lower vehicle to ground. Check wheel torque on all four wheels.
10. Install Center Carrier Support Spacer on rear drive shaft. Mount spacer using supplied 7/16" x 2.5" Bolts, nuts, and washers.



Typical assembly Fig.8

CHECKS AND ADJUSTMENTS

Check all hardware again. Test drive vehicle.

Check all hardware for tightness after first 100 miles and after off road use.

Headlights should be adjusted.



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WARRANTY

Full Traction Limited Warranty

About our warranty

Full Traction components may have minor finish damage to powder coated or plated surfaces which may occur during shipping and is not covered under warranty. Full Traction Suspension warrants each new Full Traction Component against factory defects in material and workmanship for 1 year after date of purchase. Full Traction Suspension systems are sold as complete systems and must be installed as such per Full-Traction installation instructions. Any substitutions of other manufacturers components or exemptions of required components will immediately void the warranty. Full-Traction suspension guarantees that all of its products are of the finest quality and free from manufacturing defects. Any product that has been manufactured incorrectly or is of a defective nature will be repaired or replaced at the discretion of Full-Traction Suspension. Returns: Only after written or verbal approval, send such part(s) and proof of purchase, via prepaid freight with an RGA (Return Goods Authorization) number to: Full-Traction Suspension 6951 McDivitt Dr. Bakersfield Ca 93313 USA. Shipments without an RGA number clearly designated on the outside of all containers or collect shipments will be refused. To obtain RGA(s) call 661/398-9585

What is not covered

Suspension and steel fabricated components: Limited (12) month warranty excluding the following items: Tie rod ends, bushings, hardware, brake lines, heim joints. These parts are subject to wear and are not considered defective when worn. They are warranted for 90 days from the date of purchase for defects in workmanship. Shock absorbers are covered under our limited warranty. Products or components installed on vehicles other than those specifically indicated in the Full-Traction Suspension catalog or website. Products or components which have been subjected to abuse, accident, alteration, modification, improper installation, tampering, negligence, misuse, or products installed on a vehicle used in sanctioned racing events. A race is defined as any contest between two or more vehicles, or any contest of one or more vehicles against the clock, whether or not such contest is for a prize. This warranty does not include vehicles used for government or commercial purposes. Full Traction does not warrant any product not manufactured by Full Traction Suspension. Full Traction Suspension products are not covered under warranty outside the United States of America. Full Traction Suspension shall not be liable for any loss, damage, or injury, whether ordinary, direct, special, incidental or consequential damages, arising from the manufacture, sale, installation, re-sale, delivery, possession, handling or use of its products. Full Traction Suspension is not responsible for typographical errors either in pricing or in content. Warranties, policies, and prices subject to change without notice.

Installer's Safety Warning

Full-Traction Suspension recommends our products to be installed by certified technicians only. These recommendations pertain only to Full-Traction Manufactured Products. Efforts to install our system without experience and knowledge may jeopardize the operating safety of the vehicle.

Detach and mail or fax to the address below

Name _____ Phone Number () _____

Address _____ City _____ State _____ Zip _____

Products Purchased from: _____ Date Purchased _____

Installed By _____ Date Installed _____

Vehicle make _____ Model _____ Year _____

Installation Comments _____

Product Part Number FTS7645 Description: 1999-2004 Ford 4wd Super Duty F250/F350 Spring Hanger Sys

Mail or Fax To:
Full Traction Suspension
6951 McDivitt Dr
Bakersfield Ca 93313

Fax: 661-398-9555

Warranty Registration Number _____



WARRANTY FORM

WARRANTY FORM