



Maximum Suspension Performance...means - "Full-Traction"

PART # FTS7604
4WD FORD SUPER DUTY 4" SUSPENSION SYSTEM
HARDWARE AND PARTS LIST Produced before March 1999)

Component List	Qty
FRONT SPRINGS	
FTS FSD400A Front Leaf Springs	2
CARTON "A"	
50-1014 Front Sway Bar Link 13.00	2
MO3328 Front Bump Stop	2
FTSFD99 Pitman Arm (After Mar 99)	1
FTSFD101 Track Bar Bracket (After Mar 99)	1
50-1008 Center Carrier Support Spacer	1
FTS100FBK 1" x 3" Rear Lift Block	2
60-1000 Bushing & Sleeve Kit - (contains 1)	
MOO392BK01 5/8" Hourglass Bushings/Blk	4
SLE104 Steel Sleeve	4
60-2010 Hardware Kit - (contains 1)	
B1/2" X 1.5" USS Grade 8 Bolt	2
N1/2" Metal Lock Nut	2
B916 X 3.5" USS Grade 8 Bolt	1
N916 9/16" Metal Lock Nut	1
FW916 9/16" Flat Washer	1
WTL12 9/16" Flat Plated Load Washer	1
NN38 Nylock Nut 3/8"	2
FW38 Flat Washer 3/8"	2
CB716 7/16" Centerbolt	2
NF716 7/16" Fine Thread Nut	2
B716 X 2.5" USS Grade 8 Bolt	2
FW716 Flat Washer	2
LW716 Lock Washer	2
U-Bolts	
15-R145 5/8" Round U-bolts/Rear	4
15-S105 9/16" Semi-Round U-Bolts/Front	4
60-3010 U-Bolt Hardware Kit - (contains 1)	
NH916 9/16" High nut	8
NH58 5/8" High nut	8
FWT916 9/16" Flat Washer	8
FWT58 5/8" Flat Washer	8
LW916 9/16" Lock Washer	8
Installation Instructions	1
Decals	2

Component List	Qty
CARTON "A" continued	
Shock absorber components	
Front Shocks 526503 (03333)	2
Rear Shocks 532003 (658049)	2
U1960 Shock Boots/Gray	4
Zip Ties	4
MOO392BK01 5/8" Hourglass Bushings	8
SLE104 Bushing Sleeve	8
Full Traction Decals	4
CARTON "B"	
50-4653401 Rear Add-A-Leaf	2



Warranty Number and Information
is contained on the last page.
This information should be
kept with the vehicle as
a permanent record.



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INSTALLATION **INSTRUCTIONS**

Part Number FTS7604L **4" Suspension System**

4WD FORD SUPER DUTY F250/F350 1999-2001

Note: This kit will only fit vehicles after 3/1/99 Production Date.
Installation requires a professional mechanic.

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.

PLEASE NOTE

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. In addition, a quality tire of radial design, not to exceed 35" tall x 12.50" wide is recommended.



35" x 12.50R Tires
or LT315/75R 16" Tires
on 16 x 10" Wheels
Recommended

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. Always use new cotter pins when replacing them. (Not supplied).
5. A pitman arm removal tool and tie rod separating tool are required to complete the installation.

FRONT DISASSEMBLY AND ASSEMBLY PROCEDURES

1. Position vehicle on a smooth, flat, hard surface (ie. Concrete or asphalt).
2. Block rear tires and set the parking brake.
3. Remove track rod bolt on driver side at the frame mount. **Fig 1.**
4. Raise front of vehicle and support with jack stands behind front spring.
5. Remove front tires on both sides.
6. Remove sway bar links on both sides. Save the factory 12mm bolts, to be used for reassembly.
7. On driver side, support front axle with floor jack. Remove shock and u-bolts.
8. Lower axle to clear spring and remove spring.

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.

9. Remove the front spring shackle and drill out the bottom Hole to .725 (18MM) **Fig.2**



Drill out to 18mm

10. Install Full-Traction front leaf springs into stock mounts using factory hardware. The Front of the spring can be identified by the Double Military Wrapped eyelet on one end (Large end). Mount the Military Wrapped end toward the front of the vehicle.

11. Raise axle to spring and secure with new 9/16" U-bolts and Nuts supplied. Leave hand tight. **Fig.3**

12. Install new FTS Shock absorber 526503 and torque mounting hardware to 60 lbs./ft. Repeat steps 7-11 on passenger side.

13. On 1999 models, assemble sway bar extensions using bushings and sleeves supplied. Install both sides using two new 50-1009 mounting brackets, 12mm bolts and two existing bolts previously removed. Torque to 55 lbs/ft. On 2000 models relocate (Invert) factory bracket as shown and reuse factory sway bar links. **Fig.4 Inverted Bracket**

* The rear factory sway bar links will remain unchanged.

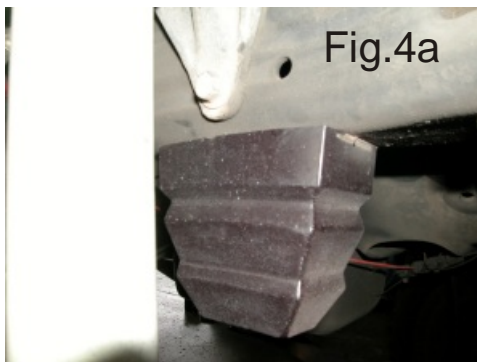
14. Remove cast track bar mount on driver side. Save the bolts and pal nuts. Some will be reused. **Inverted Bracket Fig.4**

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

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

17. Remove bump stops on frame flange. Install MO3328 bump stops with the 3/8" nuts provided. **Fig.4a**

18. 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.5**



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.



Drill out hole to 9/16"

19. Install tires and set vehicle on ground
20. Tighten spring mounting bolts and u-bolts.
Torque 9/16" u-bolts to 100 lbs/ft.
18mm Leaf Spring bolts to 130 lbs/ft.
16mm Leaf Spring bolts to 115 lbs/ft.
21. Install track rod into new track bar bracket. Torque to 115 lbs/ft. Fig.5
Tip: Turning steering slightly will help align bolt.

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. Lower rear axle and remove factory block and rear leaf spring. Driver side only at this time.
5. Open spring clips just enough to disassemble the spring pack.
6. Use C-clamp to hold leaves together and remove spring center bolt. Loosen C-clamp and disassemble spring.
7. The new Full Traction 50-4653401 Add-A-Leaf will be installed in the spring assembly in a progressive pyramid shape. If the spring is equipped with a factory overload spring on the top of the spring pack, it must remain in place after installing the new Add-A-Leaf. If the spring has a factory overload on the bottom of the spring pack, it too must remain in place. **DO NOT INSTALL THE NEW ADD-A-LEAF SPRING ANY LOWER THAN THE HELPER SPRING. DO NOT INSTALL THE ADD-A-LEAF IN OR BELOW THE HELPER SPRING ASSEMBLY.** Install in progression and clamp together with a C-clamp. Make note as to direction of arch and front and rear of the long and short end. Use a C-clamp when removing the center bolt and use a new center bolt and nut for reassembly. Torque nut to 40 lbs/ft.
8. Bend spring wrap clips back to secure spring and re-install spring into vehicle. Do not torque at this time.
9. Install Full Traction 1" rear lift block under the factory block. **Fig.6**
10. Raise axle to spring and secure with 5/8" U-Bolts supplied.
Do not torque at this time.

11. Install rear shocks 532003 and torque hardware to 60 ft./lbs.

12. Tighten spring mounting bolts and u-bolts.
Torque 5/8" U-bolts to 100 lbs/ft.
18mm Leaf Spring bolts to 130 lbs/ft.
16mm Leaf Spring bolts to 115 lbs/ft.

13. Install tires and lower vehicle to ground. Check wheel torque on all four wheels.

14. Install 50-1008 Center Carrier Support Spacer on the rear drive shaft. This spacer is designed to lessen the angle on the rear drive shaft pinion angles. The block can be mounted flat or rotated on it's side depending on the amount of angle. Use 7/16" x 2.5" Bolts, nuts, and washers.



Typical Assembly

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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website www.full-traction.com
Business Hours: 8:00 - 5:00 PST Monday - Friday

Place Warranty Sticker Here

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 FTS7604L Description: 99-02 Ford 4wd Super Duty F250/F350 4" Suspension System

Warranty Registration Number _____

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

Fax: 661-398-9555



WARRANTY FORM

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