

PART NO. F2357-B: FORD SUPER DUTY 5" PARTS LIST:

Qty.	Description	Part No.
4	9/16" X 3" X 10" Semi Round U-Bolt	5U-230SR
1	9/16" U-Bolt High Nuts & Washer	916NW
4	5/8" x 3 5/8" x 14 5/8" Round U-bolt	5U-3814R
1	5/8" U-Bolt High Nuts & Washers	58NW
2	5.5" Lifted Blocks	BL5504
1	Track Bar Bracket	F2355-05
1	Track Bar Bracket Sleeve	S10018
2	Front Sway Bar Endlinks	F2355-04
1	Sway Bar Endlinks Bushings	SBPL
1	9/16" x 3 1/2" Cam Bolt	CAM-01
1	Hardware Bag	F2357B-NB
2	Cam Washers	CAM-02
1	9/16" Unitorque Nut	916UN
2	Rear Add-A-Leaf	TCI-R22D
1	7/16" Centering Bolt and Nuts	CB716
2	Front Brake Line Bracket	BLR06
1	Rear Brake Line Bracket	BLR01
1	Instruction Sheet	F2357B-

Congratulations on your selection to purchase a Tuff Country Suspension System. We at Tuff Country are proud to offer a high quality product at the industries most competitive pricing. Thank you for your confidence in us, and our product.

*Important Notes: Please read before beginning installation. OEM Manual should be used as a reference.

TUFF COUNTRY SUSPENSION highly recommends a qualified and or certified mechanic to perform this installation.

Check off parts list to be sure all parts are on hand. If any part is missing, you may call Tuff Country at: (800) 288-2190.

Read and understand all sections of instruction manual.

Use locktite on all bolts associated with this installation.

Product safety label must be installed inside the cab in plain view of all occupants.

Torque Settings:

5/16" 15-18 ft. lbs. 3/8" 28-32 ft.lbs. 7/16" 30-35 ft. lbs. 1/2" 65-85 ft. lbs. 9/16" 75-90 ft. lbs 5/8" 85-110 ft. lbs. 3/4" 105-125 ft. lbs.

INSTALLATION MANUAL

5" SUSPENSION SYSTEM 1999 - 2001 FORD SUPER DUTY OLD PART # F2357-B NEW PART # 25920

WARNING: TUFF COUNTRY EZ-RIDE SUSPENSION HIGHLY RECOMMENDS THAT A CERTIFIED MECHANIC PERFORMS THIS INSTALLATION.

WARNING

If you desire to return vehicle to stock make sure to save all stock components.

IMPORTANT CUSTOMER INFORMATION

This vehicle's reaction and handling characteristics may differ from standard cars and/or trucks. Modifications to improve and or enhance off road performance may raise the intended center of gravity. Extreme caution must be utilized when encountering driving conditions which may cause vehicle imbalance or loss of control. <u>Drive Safely!</u> Avoid abrupt maneuvers, such as sudden sharp turns, which could cause a roll over, resulting in serious injury or death.

It is the customer's responsibility to make sure a retorque is performed on all hardware associated with this suspension system after the first 100 miles of installation. It is also the customer's responsibility to do a complete re-torque after every 1000 miles or after every off road use.

After the original installation, Tuff Country also recommends having the alignment checked every 6 months to ensure proper tracking, proper wear on tires and front end components. Tuff Country takes no responsibility for abuse, improper installation, or improper suspension maintenance.

IMPORTANT NOTICE

DO NOT install a body lift in combination with a suspension system. If a body lift is used in conjunction with any Tuff Country Suspension product, your Tuff Country WARRANTY WILL BE VOID.

NOTICE

It is the responibilty of the customer or the mechanic to wear safety glasses at all times when working with air tools.

Please Follow Instruction Carefully

Before installation begins, drive and check to make care not to bend or kink brake hoses. sure there are not any uncommon sounds and or frame damage. Also at this time measure from the center of 6. On the driver side remove the front and rear stock spring the hub to the bottom of fender well and record eye bolts and save for later re-installation. Remove stock measurements below.

rre installation measurements:
Driver Side Front
Passenger Side Front
Driver Side Rear
Passenger Side Rear
At the end of the installation take th measurements and compare to the pre ins measurements.
Post Installation Measurement:
Driver Side Front
Passenger Side Front
Driver Side Rear
Passenger Side Rear
(2.44) 1.44 (1.14)

Front End Installation:

- 1. To begin installation, block the rear tires and safely raise the front of the vehicle with a air or hydraulic jack, place a pair of jack stands under frame just behind rear shackle and front spring hanger. Place jack stands on both the driver and passenger side of vehicle.
- 2. Using a floor jack, support the front axle. Starting on the driver side of the vehicle, remove tire, wheel and shock 9/16" x 3" x 10" Square U-bolts and torque to 90 ft. lbs. absorbers. Disconnect front stock sway bar endlinks from Repeat procedure on passenger side. stock location. Special Note: Stock sway bar endlinks and hardware may be discarded, new endlinks and hardware will be used. Repeat procedure on passenger 10. Using a pitman arm puller, remove stock pitman arm side.
- from the driver side stock track bar bracket. Discard bolt, separate part number. If your vehicle was manufactured bracket to frame. Note: Do not use any air tools when arm is part # FSA. If your vehicle was manufactured working with the 3 stock bolts that hold stock track bar post March of 1999 the part number for the new pitman bracket to the frame. Save hardware for later re- arm is part # FSA-SD. installation. Remove and discard the stock track bar bracket. A new track bar bracket will be used.

See Illustration #1

installation. Repeat procedure on passenger side.

- 5. Ease off on jack and lower the front axle away from the front spring assembly approximately 4" - 4.5". Take special
- springs and discard. Repeat procedure on passenger side.
- 7. Locate the front springs. Note: If you have a gas vehicle the TCI-F2364 springs will be used. If you have a diesel vehicle the TCI-F2365 springs will be used. Before installation of springs the sleeves from each end of the springs need to be removed. Also remove the two piece bushings from each end of the spring. Make sure to use a lithium base or moly grease prior to inserting e same bushings back into springs. This will increase the life of tallation the bushing, prevent squeaking, allow springs to flex and give the spring the best ride possible. If lithium base or mole grease is not used problems will occur in the ride of the spring.
 - 8. Install front springs into stock location. Note: There is a off-set centering bolt on the new springs. The longer end of the leaf spring should be installed towards the front of the vehicle. Secure using stock spring eye bolts. Torque front spring eye bolt to 120 ft. lbs. Torque the rear spring eye bolt and top shackle bolt to 35 - 40 ft. lbs. Special Note: The shackle bolt should be torqued with the weight on the vehicle. Repeat procedure on passenger side.

See Illustration # 2

9. Raise up on jack until the axle sits flush with the bottom of the newly installed leaf spring. Re-install stock U-bolt plate/lower shock mount into stock location. Install new

See Illustration # 3

and discard. Install new pitman arm into stock location using stock hardware. Note: The pitman arm is not 3. Locate the stock front track bar and remove stock bolt included in this box kit and should be purchased as a Next remove the (3) stock bolts that hold stock track bar pre March of 1999 the part number for the new pitman

See Illustration #4

11. Locate new upper driver side upper track bar bracket. Install into stock location using stock hardware. Note: Do 4. Place a hydraulic jack under front axle. Loosen and not use any air tools when working with the 3 stock bolt remove the front U-bolts and discard. New front U-bolts are that hold new track bar bracket to stock location. Make provided in this kit. Also at this point remove the lower sure to use locktite and torque to proper spec. Special shock mount/U-bolt plate and set aside for later re- Note: If your vehicle was manufactured pre March of 1999 install track bar into newly installed track bar bracket and secure using new (1) 9/16" x 3 1/2" cam bolt

(2) cam washers and (1) 9/16" unitorque nut. If your Longer shocks will be needed with this suspension vehicle was manufactured post March 1999, a reducing system. The shocks are not included in this kit. Tuff sleeve needs to be installed into the stock track bar. Country recommends a 26" fully extended gas shock This reducing sleeve is included in the kit. This will with this system. Also Tuff Country offers a multiple allow the 9/16" cam bolt to be assembled. If you are not shock system for the front. If you would like to able to line up the holes in the new track bar bracket purchase one please feel free to contact us at (800) 288and the stock track bar, the weight of the vehicle may 2190. Part number would be DSFF. need to be on the vehicle. If this is the case, perform this step at the end of the installation once the tires, 15. Check and double check to make sure that all steps wheels and shocks have been installed.

See Illustration # 5

12. On the driver side locate stock front brakeline extending were not able to re-install the stock front track bar into brackets. Remove the stock bolt that holds stock brake line the new track bar bracket perform this step as you bracket to frame and save for later re-installation. Install lower the vehicle to the ground. new "Z" style brakeline bracket into stock location using stock hardware. Connect stock brakeline bracket to newly installed brakeline bracket and secure using new 5/16" hardware. Repeat procedure on passenger side.

See Illustration # 6

Special Note:

If your vehicle is a 1999 Super Duty please follow step #

If your vehicle is a 2000 Super Duty please follow step # 14

- 13. Locate (2) new sway bar endlinks, (1) SBPL, (4) 1/2" x 3" bolts, (8) 1/2" flat washers and (4) 1/2" unitorque nuts from hardware bag marked F2357B-NB. Install new poly bushing and sleeves into each end on the new sway bar end links. Special Note: Make sure to use a lithium base or moly grease prior to inserting bushings into sway bar endlinks. This will increase the life of the bushing and help prevent squeaking. Install new sway bar endlinks into stock location, secure using new 1/2" bolts and hardware. Special Note: The stock sway bar and the upper stock sway bar mount may need to be enlarged with a drill bit to 1/2".
- 14. Locate (2) new sway bar endlinks, (1) SBPL, (2) 1/2" x 4 1/2" bolts, (2) 1/2" x 3" bolts, (8) 1/2" flat washers and (4) 1/2" unitorque nuts from hardware bag marked F2357B-NB. Install new poly bushing and sleeves into each end on the new sway bar end links. Special Note: Make sure to use a lithium base or moly grease prior to inserting bushings into sway bar endlinks. This will increase the life of the bushing and help prevent squeaking. Install new sway bar endlinks into upper stock location, secure using new 1/2" x 4 1/2" bolts and hardware. Secure endlinks to stock sway bar using 1/2" x 3" bolt and hardware. Special Note: The stock sway bar and the upper stock sway bar mount may need to be enlarged with a drill bit to 1/2".

were performed carefully and all hardware is torqued to proper specs. Remove hydraulic jack from under the vehicle. Next install the tires and wheels on the front end and safely lower vehicle to the ground. Special Note: If you

Front End Installation Complete

Rear End Installation

- Safely lift the rear end of the vehicle and place a pair of jack stand under the frame on both side. Remove rear wheels, tires and shocks.
- 17. Place a hydraulic jack stand under the rear axle and safely remove stock U-bolts and discard. Place U-bolt plate aside for later re-installation. Lower down on jack stand approximately 4".
- 18. Locate new rear add-a-leaf, new 7/16" centering bolt and nuts. Working on the driver side place a pair of "C" clamps around rear spring about 2" from the spring clamps. Safely remove stock centering bolt and discard. Install new add-a-leaf to stock spring assembly. Special Note: The add-a-leaf that is being installed has an off-set centering bolt hole. The longer end of the add-a-leaf is to be installed towards the rear of the vehicle. Secure new add-a-leaf to stock spring assembly with new centering bolt and nut. Special Note: New add-a-leaf should be installed into the stock spring assembly in progression in order. The new add-a-leaf should be installed between the stock over load and spring assembly. The stock over load is usually the un-arched spring at the bottom of the leaf pack. Also Tuff Country recommends not using any air tools when installing new add-a-leaf into stock spring assembly. If air tools are used the centering bolt may strip. Torque new centering bolt to 35 ft. lbs. Remove "C" clamps from stock springs. With a suitable cutting tool, cut off the excess thread from the new centering bolt. Repeat procedure on passenger side.

See Illustration # 7

19. Locate (2) new 5.5" blocks. Install new block into stock location and raise up on hydraulic jack until block seats into stock location. Repeat procedure on passenger side.

20. Locate (4) new 5/8" x 3 5/8" x 14 5/8" round U-bolts, new 5/8" high nuts and washers. Working on the driver side, re-install upper U-bolt plate into stock location and install new U-bolts into stock location. Torque to 130 ft. lbs. Repeat procedure on passenger side.

See Illustration #8

21. Locate the new rear brakeline bracket, (1) 5/16" x 1 1/4" bolt, (2) 5/16" flat washers and (1) 5/16" lock nut. On the top of the rear differential remove the stock bolt that holds the stock brake line bracket to the rear differential. Install the new brakeline bracket into the stock location using stock hardware and install the stock brakeline bracket to the newly installed brakeline bracket and secure using 5/16" hardware.

Note: Longer shocks will be needed with this suspension system. The shocks are not included in this kit. Tuff Country recommends a 33" fully extended gas shock with this system.

- 22. Check and double check to make sure that all steps were performed properly.
- 23. Install tires and wheels on the rear end and safely lower vehicle to the ground.

Congratulation rear end installation complete Take directly to the alignment shop for proper alignment

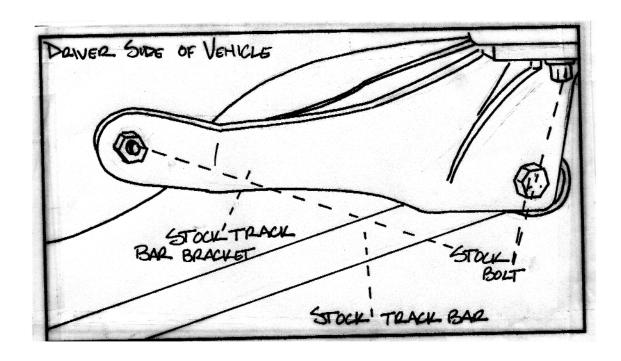


ILLUSTRATION #1

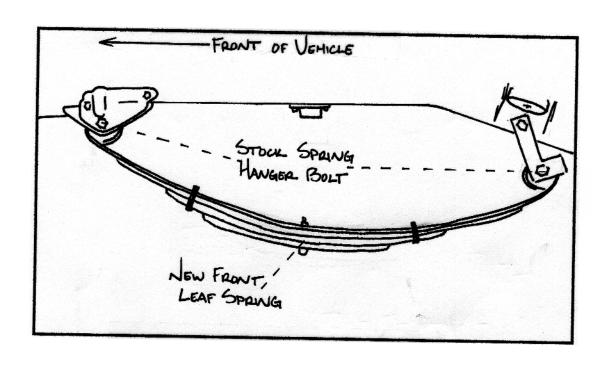


ILLUSTRATION #2

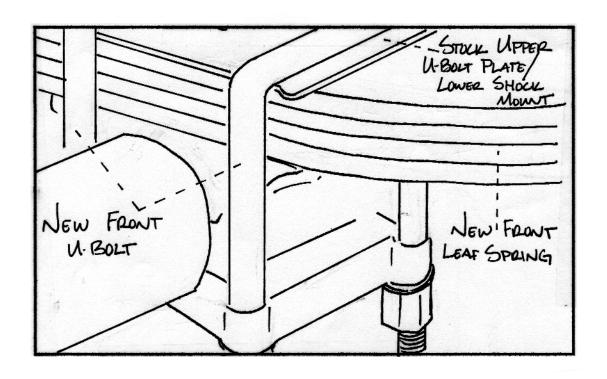


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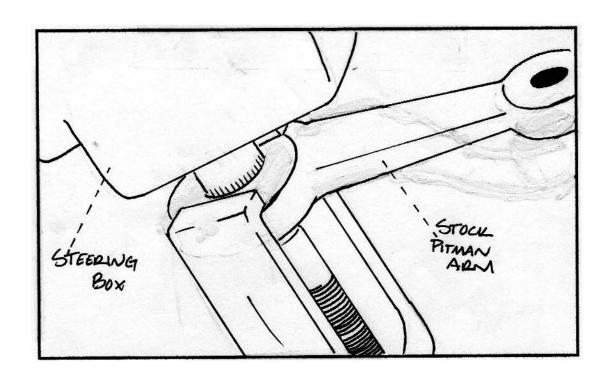


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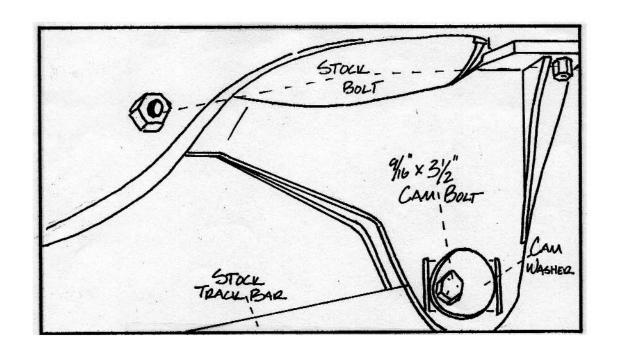


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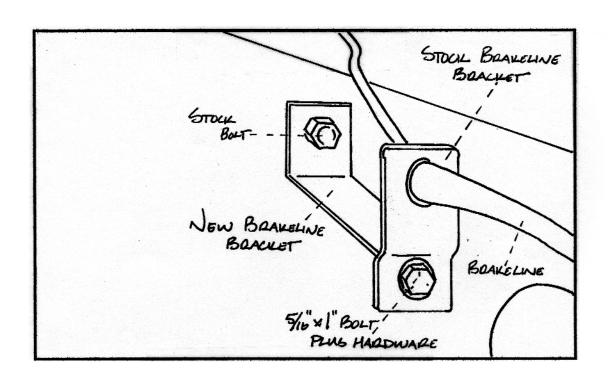


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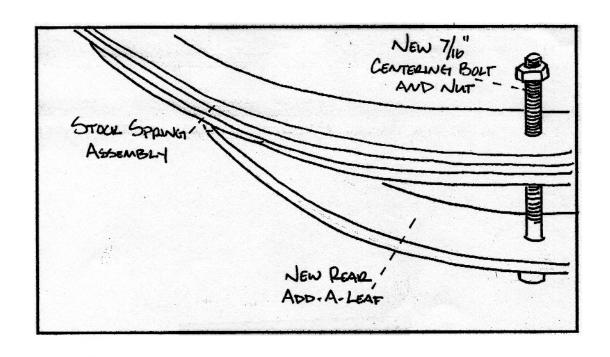


ILLUSTRATION #7

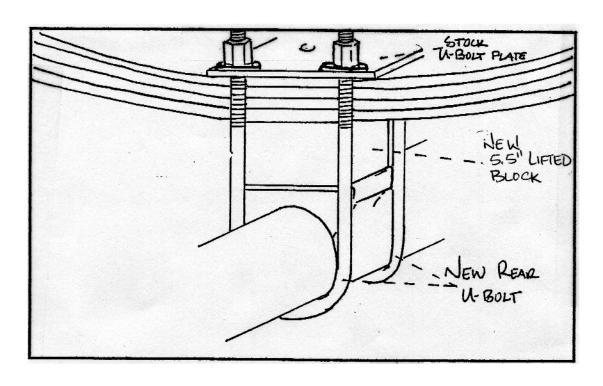


ILLUSTRATION #8