

TUFF COUNTRY SUSPENSION

INSTALLATION MANUAL FORD F350 1980-97 4 WD 4" SUSPENSION LIFT

Kit Box No. F4350B Without rear leaf springs.
Kit Box No. F4350B *With* rear leaf springs.

SYSTEM PARTS CHECK LIST:

QTY.

PART NO. F4350-B

TCI-F4350 FRONT LEAF SPRINGS	2
DROP TRACKING BRACKET	1
4" REAR LIFT BLOCK	2
SWAY BAR DROP BRACKET (FRONT)	1
SWAY BAR DROP BRACKET (REAR)	1
U-BOLTS (FRONT)	4
U-BOLTS (REAR)	4
ADD-A-LEAFS (REAR)	2
CENTER BOLTS - 3/8"	2
BRAKELINE ADAPTERS	3
HARDWARE PACK	1

PART NO. F4351-B

TCI-F4350 FRONT LEAFS SPRINGS	2
TCI-F4R3 REAR LEAF SPRINGS	2
DROP TRACKING BRACKET	1
4" REAR LIFT BLOCK	2
SWAY BAR DROP BRACKET (FRONT)	1
SWAY BAR DROP BRACKET (REAR)	1
U-BOLTS (FRONT)	4
U-BOLTS (REAR)	4
BRAKELINE ADAPTERS	3
HARDWARE PACK	1

PLEASE FOLLOWING INSTRUCTIONS CAREFULLY

Front end installation.

1. To begin installation, safely raise front of vehicle with an air or hydraulic jack and place a pair of jack stands under frame in front of front leaf springs.

2. Starting at the front of the vehicle, remove tires and stock shock absorbers.

3. Locate and remove the stock tracking bar from the stock tracking bar bracket. The tracking arm bracket is located behind the front axle closer to the driver side of vehicle. Now remove the stock tracking arm bracket and discard bracket. **Note: Do not discard tracking arm, it will be re-installed later.**

4. Remove brake line brackets from frame rails and anti-sway bar links if equipped.

5. Place a hydraulic jack under front axle and remove stock u-bolts from each side of axle. Loosen spring eye hanger and shackle bolts on the front and rear of front leaf springs. Ease up on jack so that the axle is low enough to remove

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.

Read and understand all sections of instruction manual.

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.

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

Front end alignment will be required.

6. Remove spring eye hanger and shackle bolts and set aside for re-use. Now remove stock front leaf springs.

7. Install new front leaf springs, part #F4350 using original eye hanger and shackle bolts. **Note:** Center aligning pin is offset, the shorter distance from end is placed in the forward position. **Do not fully tighten front spring shackle bolts at this point.** Jack up axle and align spring center bolt into stock spring seat.

8. Install new front u-bolts 9/16" x 3" x 10" square. And torque to proper torque settings. **Note: Be sure that center pin is aligned with the hole in the axle pad.**

9. Install new drop tracking bracket in the same position as the stock tracking bracket using stock nuts and bolts. Re-install the stock tracking arm into new tracking arm bracket using new 9/16" x 3 1/2" cam bolt and D-washers.

10. Remove the stock sway bar end links from the frame and discard. Install new sway bar endlinks in the same manner as the stock endlinks. Install stock sway bar to the new sway bar endlinks.

11. Remove brake line where the rubber brake hose connect to the steel brake line at the frame of vehicle. Re-route the steel brake line so the steel line and the rubber brake hose can be re-connected through the new brake line adapter. **Caution: Take care not to kink pinch or stretch brake lines.**

12. Install new pitman arm (not included in kitbox, but required for this system. Install new shocks. Install front tires and lower vehicle.

REAR END INSTALLATION

If you purchased your system without rear springs, follow these rear end instructions.

1. **Rear add-a-leaf and block installation:** Place jack stands under axle. Remove rear shocks. If vehicle is equipped with sway bar, disconnect at the lower link. Remove existing brake line bracket from rear differential housing and save the bolt. Remove U-bolts and lower rear axle enough to remove stock spacer block and discard. Tighten C-clamp on leaf springs. Remove center bolt from leaf springs using vice grips and wrench. Release C-clamp. Install new add-a-leaf. **Note: Center pin hole is offset, be sure shorter end is placed forward and longer end is to the rear.** Install add-a-leaves between the large flat overload spring and original spring pack. Use a C-clamp to clamp springs together and insert new 3/8" center bolt through center hole and torque to proper torque. Cut off excess bolt with suitable cutting tool. Clamp springs at retaining clips and then bend tabs back to stock position.

2. Install new 4" blocks making sure that the smaller end of blocks are going toward the front of the vehicle and the dowel pin is aligned in to the hole on the axle plate. Jack up axle so that the center pin on the leaf springs is aligned properly in the holes in the new blocks. Install new u-bolts and torque to 112 ft.-lbs.

3. Disconnect the upper sway bar mount from the frame and discard stock sway bar mounts. Install new sway bar endlinks. Connect sway bar to the new sway bar extension bracket.

4. At the top of rear differential, locate the speed sensor wire. Disconnect the wire from the wire harness and relocate the speed sensor wire above the differential. Make sure not to kink or bend wire.

5. Attach the small brake line bracket to the original brake line bracket using the 5/16" bolt, nut and washer. Now attach the bottom of the new brake line bracket to the differential housing using the original bolt.

6. Install new shocks, and tires.

Installation complete.

REAR END INSTALLATION

If you purchased your system with rear springs, follow these rear end instructions.

1. **Rear leaf spring installation:** Place jack stands under axle. Remove rear shocks. If vehicle is equipped with sway bar, disconnect at the lower link. Remove existing brake line bracket from rear differential housing and save the bolt. If vehicle is equipped with sway bar, disconnect the sway bar from the lower endlinks. Remove U-bolts and lower rear axle enough to remove the stock spacer block and stock leaf springs. Unbolt the spring eye hanger bolts and the shackle bolts so that the springs can be removed. Remove the stock spacer block and discard. Remove stock leaf springs. Save stock bolts for later use. Install new leaf springs. **Note: Center pin hole is offset, be sure shorter end is placed forward and longer end is to the rear.**

2. Install new 4" blocks making sure that the smaller end of blocks are going toward the front of the vehicle and the dowel pin is aligned in to the hole on the axle plate. Jack up axle so that the center pin on the leaf springs is aligned properly in the holes in the new blocks. Install new u-bolts and torque to 112 ft. lbs.

3. Disconnect the upper sway bar mount from the frame and discard stock sway bar mounts. Install new sway bar endlinks. Connect sway bar to the new sway bar extension bracket.

4. At the top of rear differential, locate the speed sensor wire. Disconnect the wire from the wire harness and relocate the speed sensor wire above the differential. Make sure not to kink or bend wire.

5. Attach the small brake line bracket to the original brake line bracket using the 5/16" bolt, nut and washer. Now attach the bottom of the new brake line bracket to the differential housing using the original bolt.

6. Install new shocks, and tires.

Installation complete.