

# SOUTHERN TRUCK

Lift your life.

## 2011-2015 Ford F250 Super Duty 4WD 6" Suspension Lift Kit (Diesel)

# 25004

2 - Diesel Coil Springs	2 - Radius Arm Drop Brackets
1 - Track Bar Bracket	1 - Pitman Arm
2 - Front Bump-Stop Spacer	2 - Sway Bar Bracket (Dr/Pass)
1 - Front Driver Brake Line Bracket	1 - Front Driver Stabilizer Bracket
1 - Front Pass. Brake Line Bracket	1 - Front Pass. Shim Bracket
1 - Rear Brake Line Bracket	4 - Rear U-Bolts
2 - Rear Spacer Blocks	2 - Front Brake Lines and clips
4 - Block U-Bolts	4 - Shim Plates
	4 - Shock Absorbers (Fr/Rr)

## PRE-INSTALLATION

**Professional installation by a certified technician is strongly recommended.**

*Not responsible for altered products. No claims are made regarding any lifting devices. Any and all claims implied in this document excluded.*

### NOTES:

The following instructions assume the use of aftermarket wheels with 4.5" back spacing and size 35x12.50x17 tires. Factory rear contact overload springs, if installed, will need to be removed in order to install block kit.

### REQUIRED TOOLS:

10mm Socket/Wrench	15mm Socket/Wrench	18mm Socket/Wrench
19mm Socket/Wrench	21mm Socket/Wrench	24mm Socket/Wrench
30mm Socket/Wrench	34mm Socket	46mm Socket
5/16" Socket	5/8" Socket/Wrench	1 1/8" Wrench
Pliers	Pitman Arm Tool (3.25" Spread)	
Jack	Jack Stands	

### Torque Specs:

Size	Grade 5	Grade 8	Size	Class 8.8	Class 10.9
7/16"	45 ft/lbs	60 ft/lbs	8MM	18ft/lbs	23ft/lbs
1/2"	65 ft/lbs	90 ft/lbs	10MM	32ft/lbs	45ft/lbs
9/16"	95 ft/lbs	130 ft/lbs	12MM	55ft/lbs	75ft/lbs
5/8"	135 ft/lbs	175 ft/lbs	14MM	85ft/lbs	120ft/lbs
3/4"	185 ft/lbs	280 ft/lbs			

## INSTALLATION INSTRUCTIONS

- STEP 1:** Block rear wheels and jack up front of vehicle. Support vehicle with jack stands under frame and remove front wheels.
- STEP 2:** Place jack under front axle and raise jack to compress suspension slightly.
- STEP 3:** On driver side, disconnect track bar from frame bracket. (30mm wrench)
- STEP 4:** Remove bump stop and cup bracket from frame rail.
- STEP 5:** Use pliers to disconnect ABS sensor wire from lower spring seat and radius arm.
- STEP 6:** Unbolt brake line brackets from spring seat. (10mm wrench)
- STEP 7:** If equipped with automatic hubs, disconnect vacuum line from clamp on axle.
- STEP 8:** Remove stock brake line bracket from frame. (10mm socket - save factory hardware)
- STEP 9:** Remove nut, retaining washer and rubber bushing from both upper shock mounts. (19mm wrench- save factory hardware)
- STEP 10:** Remove lower shock bolts. (18mm wrench - save factory hardware)
- STEP 11:** Unbolt sway bar from frame. (15mm socket - save factory hardware)
- STEP 12:** Remove factory stabilizer from passenger side frame mount. (15mm wrench - save factory hardware)
- STEP 13:** Slowly lower jack until coil springs are free and remove springs. (Coil spring compressor may be required)
- STEP 14:** Support both radius arms with jack stands. Loosen bolt holding upper control arm to axle. (24mm wrench and socket)
- STEP 15:** Remove bolt holding upper control arm to frame. (1 1/8" wrench and socket - save factory hardware)
- STEP 16:** Insert radius arm drop bracket in stock location and bolt in place using spacer sleeves, 3/4" x 4 3/4" bolts, nuts and washers included in kit, but do not tighten.
- STEP 17:** Install radius arms in new drop bracket (lower holes) with factory hardware.
- STEP 18:** Re-tighten bolt securing arm to axle using factory hardware - raise or lower vehicle to align holes.
- STEP 19:** Attach ABS sensor wire to radius arm.
- STEP 20:** Remove factory track bar bracket from frame. (21mm wrench and 19mm socket - save factory hardware)
- STEP 21:** Install new track bar bracket on frame in same location and secure with factory hardware.
- STEP 22:** Install included bump stop extension between frame and bump stop cup bracket in original location. Secure with included 8mm x 95mm bolt. Torque bolt to 15ft-lbs and reinstall factory bump stop in bracket.

## INSTALLATION INSTRUCTIONS *Front (Continued)*

- STEP 23:** Lower front axle enough to install new coil springs. Install springs in lower coil buckets on axle and rotate as needed to ensure proper seating of the coil pigtail in the bucket, then raise axle until springs are seated in the upper spring buckets.
- STEP 24:** Compress front springs to install new shock absorbers and secure with factory hardware. (19mm wrench upper - 18mm wrench lower) Tighten only to bulge bushing.
- STEP 25:** Install tires and wheels and lower vehicle to ground.
- STEP 26:** Line up track bar with hole in new track bar bracket. (If necessary, start vehicle and turn wheels to help align track bar) Attach track bar with factory bolt and tighten.
- STEP 27:** Lift vehicle again - support on jack stands.
- STEP 28:** Remove C-shaped clip securing brake line to bracket and remove line from factory bracket.
- STEP 29:** Loosen hard line from brake line block. (10mm wrench) Straighten out metal brake line.
- STEP 30:** Remove stock brake line from caliper. Install included brake line on caliper.
- STEP 31:** Install new brake line bracket in factory location with factory hardware and tighten. (10mm socket)
- STEP 32:** Attach new brake line to metal brake line and tighten.
- STEP 33:** Secure brake line to bracket using supplied brake line clip.
- STEP 34:** Reinstall ABS wire and vacuum line.
- STEP 35:** Install new sway bar link drop brackets **only if factory stabilizer will be reused.** Driver side: Install bracket and shim (2 holes) in factory location with factory hardware and tighten. (15mm socket) Make sure you have the right bracket, the flat side should face the outside of the vehicle and should position the new mount holes directly below the factory location. Passenger side: Install bracket and shim (3 holes - 3rd hole on flange toward rear of vehicle) in factory location and secure with factory hardware. (15mm socket)  
**Do not install brackets if factory stabilizer will not be reused or after market stabilizer will be installed.**
- STEP 36:** If reinstalling factory stabilizer, attach sway bar to drop bracket/shims with supplied 7/16" x 1 1/4" bolts, washers and lock nuts and tighten. (5/8" wrench).
- STEP 37:** Install stock stabilizer in passenger side shim bracket using factory hardware.
- STEP 38:** Remove cotter pin and nut from drag link end where it attaches to pitman arm. (21mm wrench)
- STEP 39:** Dislodge link with tie rod end puller or pickle fork. If you can twist the studs with your finger or any looseness is felt, replace link.
- STEP 40:** Remove nut from steering sector and remove pitman arm with puller tool. Inspect splines on shaft for excessive wear and repair if needed. (46mm socket)
- STEP 41:** Install new pitman arm, lock washer and nut - tighten bolt, torque to 350 ft. lbs. (46mm socket)
- STEP 42:** Attach drag link stud to pitman arm. Torque nut to factory specifications and install cotter pin. Check linkage clearances while turning steering wheel from full lock to full lock in both directions.
- STEP 43:** Remove jack stands and lower vehicle to ground.
- STEP 44:** Tighten all radius arm bolts.

## INSTALLATION INSTRUCTIONS *Rear*

- STEP 1:** Chock front wheels and jack up rear of vehicle. Place jack stands under frame rails. Remove wheels and tires.
- STEP 2:** Support rear axle with floor jack under rear differential.
- STEP 3:** Remove factory shock absorbers. (18mm wrench upper - 19mm and 15mm wrenches lower - Save factory hardware)
- STEP 4:** Locate brake line bracket on driver side of rear axle. Remove breather tube from barbed fitting.
- STEP 5:** Unscrew brass fitting. (5/8" wrench - Retain fitting for reuse)
- STEP 6:** Place included extender bracket on axle and secure with brass fitting. (5/8" wrench)
- STEP 7:** Attach factory brake line bracket onto new bracket using supplied 7/16" x 1" bolt, washer and lock nut. (5/8" wrench)
- STEP 8:** Reinstall differential vent hose.
- STEP 9:** Remove stock u-bolts. (24mm socket) **Factory block will not be reused (if equipped).**
- STEP 10:** Lower axle assembly with jack to allow lift block installation. Install new lift blocks between leaf spring and axle. Raise axle with jack and align pins in blocks and axle seat.
- STEP 11:** Install included shim plates between block and leaf spring and secure block to spring with included 7/16" u-bolts. (5/8" wrench)
- STEP 12:** Install included 5/8" u-bolts with supplied hardware. (3/4" wrench)
- STEP 13:** Install new shock absorbers and secure with factory hardware. (18mm wrench upper - 19mm and 15mm wrenches lower)
- STEP 14:** Install wheels and tires.
- STEP 15:** Jack up vehicle to remove jack stands, then lower vehicle to floor.
- STEP 16:** With vehicle weight on axle, torque u-bolts to 130-150 ft-lbs.
- STEP 17:** Check all hardware for proper torque.

## POST-INSTALLATION

- STEP 1:** Adjust steering wheel to re-center before driving vehicle.
- STEP 2:** Check for proper torque on all fasteners. Check steering for proper working order and check for interference. Inspect and test brake system. Check clearance between all rotating, mobile, fixed and hot parts. Check clearance between exhaust and brake lines, fuel tank and lines, wiring harness and floorboards.
- STEP 3:** Check distance between tire sidewall and the brake hose during full-turn to full-turn steering sweep. Do not skip this step! Any contact may result in component failure. Check rear brake hoses at full extension for proper slack and if needed, purchase longer hoses.
- STEP 4:** Have front end alignment performed by a qualified technician and set to:  
Caster: min - 4.0 degree, Camber: 0.6 - .09 degree, Toe: .10 - .15 degree
- STEP 5:** Re-torque u-bolts and other fasteners after first 100 miles, then again after another 100 miles.
- STEP 6:** Adjust headlights to proper alignment.

**MAINTENANCE:** After 500 miles, re-torque all fasteners. (Recommended every 1000 miles thereafter) Have all suspension, driveline and steering components inspected by a certified technician during routine maintenance (Recommended every 3000 miles)

## HARDWARE PARTS LIST

- 2 - Diesel Coil Springs
- 1 - Track Bar Bracket
- 2 - Front Bump-Stop Spacer
- 1 - Front Driver Brake Line Bracket
- 1 - Front Pass. Brake Line Bracket
- 1 - Rear Brake Line Bracket
- 2 - Rear Spacer Block
- 4 - Spring U-Bolt
- 4 - Shim Plate
- 4 - Shock Absorber (Fr/Rr)

- 2 - Radius Arm Drop Brackets
- 1 - Pitman Arm
- 1 - Driver Sway Bar Bracket
- 1 - Pass. Sway Bar Bracket
- 1 - Front Driver Stabilizer Bracket
- 1 - Front Pass. Shim Bracket
- 4 - Rear U-Bolts
- 2 - Front Brake Line
- 2 - Front Brake Line Clip

