



1/15/04

**'99- '01 F250/F350 Super Duty 4WD
Leveling Kit
P/N 10-42200**

INSTALLATION INSTRUCTIONS

NOTE: Each lift kit, and options to lift kits, are packaged separately. Therefore installation procedures are covered in separate instructions. Familiarize yourself with each specific set of instructions before beginning.

PART LIST

ITEM	DESCRIPTION	QTY.	ILLUS.
20-52400-1	Bracket, Front Spring Hanger (Drvr)	1	3
20-52400-2	Bracket, Front Spring Hanger (Pass)	1	3
20-52400-3	Bracket, Spring Shackle	2	4
20-52200-4	Bracket, Crashbar Superduty (Pass)	1	
20-52200-5	Bracket, Crashbar Superduty (Drvr)	1	
20-69813	Hardware Pack Containing: (Crash bar)		
13-21651-Z	Hex Bolt, 1/2"-13 x 1-3/4" Gr.8	2	
13-21118-Z	Hex Bolt, 7/16"-14 x 1-1/4" Gr. 8	2	
13-30382-Z	Flat Washer, 1/2" HRDN	4	
13-30304-Z	Flat Washer, 7/16" HRDN	4	
13-10514-Z	Top Lock Nut, 1/2"-13 GR. C	2	
13-10384-Z	Top Lock Nut, 7/16"-14 GR. C	2	

INTRODUCTION

- Installation by a professional mechanic is recommended. Use of the appropriate tools, a Ford service manual, and a shop hoist can greatly reduce installation time.
- Prior to installation, carefully inspect the vehicle's steering and drive train systems, paying close attention to the tie-rod ends, pitman and idler arms, ball joints and wheel bearing preload. Also check steering-to-frame and suspension-to-frame attachment points for stress cracks. The overall vehicle must be in excellent working condition; repair or replace worn parts.
- Read instructions carefully and study illustrations before attempting installation. *RCD Suspension* is not responsible for damage, failure or injury resulting from improper installation or parts substitution of this kit.
- Check parts and hardware against the parts list to assure that your kit is complete. Report any shortages to RCD Suspension at (1-619-588-4723). The parts and hardware supplied are of high-grade material and must not be replaced by inferior parts or failure may result.
- Separate parts according to the areas they will be used. Placing the hardware with brackets before you begin will save installation time.

- All components in this kit come with a protective coating. Do not plate (i.e. chrome, cadmium, zinc etc.) or otherwise alter the finish in any way. This could weaken the structural strength of the components.
- Secure and properly block vehicle prior to beginning installation.
- Always wear safety glasses when using power tools.
- Foot-Pound torque readings are listed on the Torque Specifications chart at the end of the instructions unless specifically stated in an instruction. **DO NOT USE AN IMPACT WRENCH TO TIGHTEN ANY OF THE BOLTS.**

PLEASE NOTE

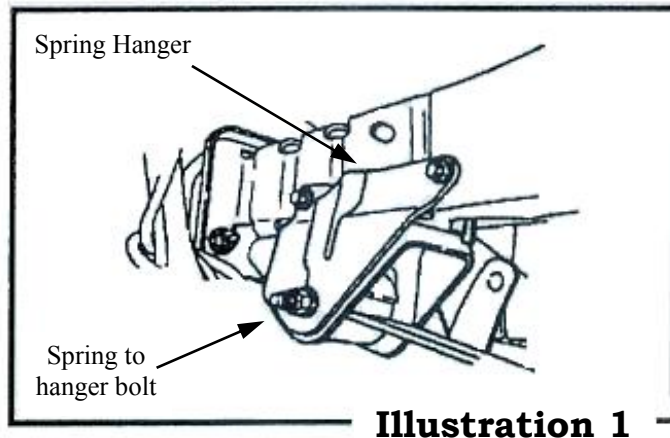
- ❑ **WARNING:** DO NOT USE WHEEL SPACERS
- ❑ Front end realignment is necessary.
- ❑ Speedometer recalibration is necessary if larger tires (10% more than stock diameter) are installed.
- ❑ Clears, 33" x 12.50" tires.
- ❑ Minor fender/bumper trimming may be required based upon wheel width and offset/backspacing
- ❑ Does not include shocks.
- ❑ Some vehicles may require longer Bilstein shock absorbers, use applications:\nBilstein front shocks #BE5-2818;\nBilstein rear shocks #BE5-2819.
- ❑ No driveline modifications are required.
- ❑ Headlights will have to be adjusted after install.

INSTALLATION

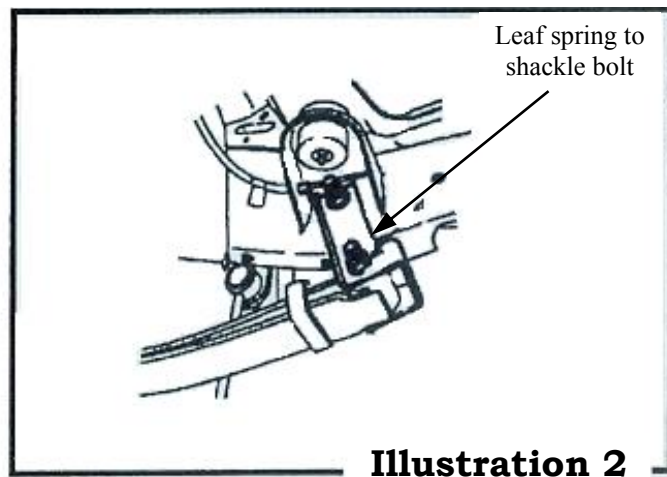
- 1) Raise the vehicle. If working without a shop hoist, put vehicle in gear, set emergency brake and block rear wheels, in front and behind tires. Loosen lug nuts. Lift vehicle with floor jack and place safety jack stands under frame rails, behind front wheel wells, and lower frame onto stands. Remove the front tire/wheel assemblies.
- 2) Using a suitable floor jack, raise the jack just enough to support front axle's weight and remove shock.

3) **For vehicles factory equipped with a crash bar, 2002 and newer.** Remove front bumper, be careful to unplug all accessory lights. Remove 3 bolts on each side of the factory crash bar and set aside.

4) Remove leaf spring to hanger bolt and lower spring. **(Illustration 1)**

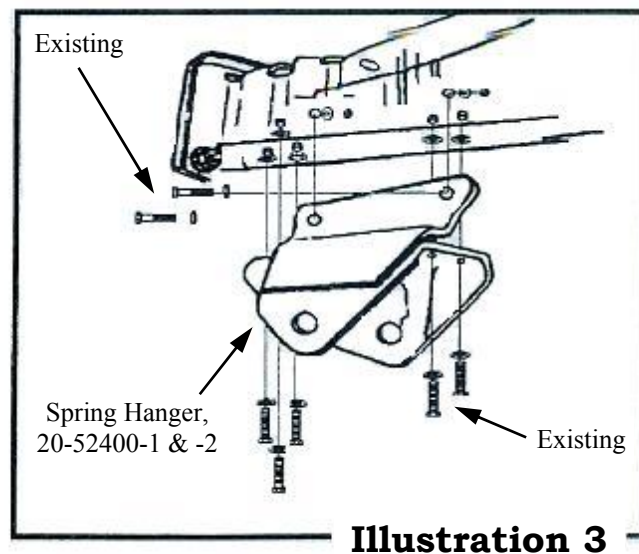


5) Remove leaf spring to shackle bolt **(Illustration 2)** and remove spring. If necessary, lower jack until leaf spring is out of spring shackle.



6) Remove existing hanger from frame.

7) Install new Hanger (20-52400-1 DRVR, -2 PASS) using existing hardware **(Illustration 3)**. Torque hanger to frame nuts to 76 ft. lbs.



8) Remove existing shackle from frame.

9) Install new Springs Shackle Bracket (20-52400-3) using existing hardware **(Illustration 4)**. Torque bracket to frame nut to 65 ft. lbs.

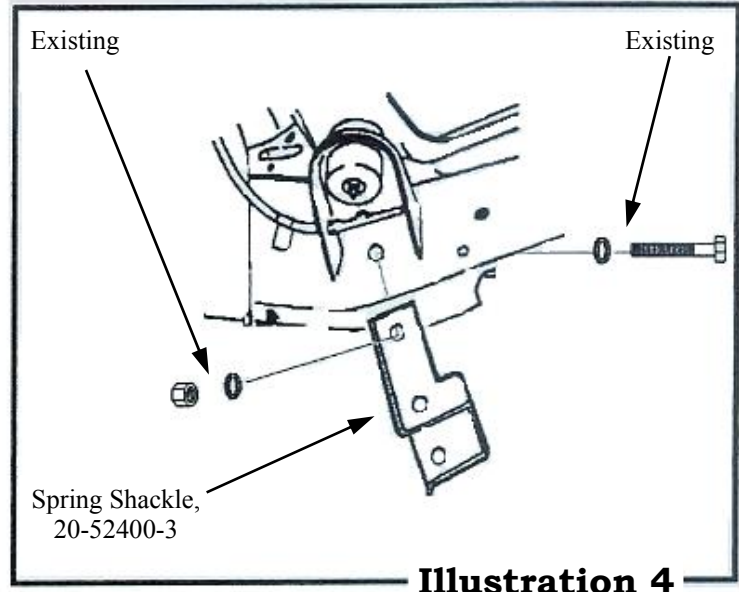
9) Install existing leaf spring to front hanger using existing hardware. **Make sure to install bolts with head towards center of vehicle.** Do not torque at this time.

10) Install spring to rear shackle using existing hardware with bolt head facing inside. Torque spring to shackle nut once vehicle is supporting its own weight.

11) Install shocks using existing hardware. Torque nuts to 76 ft. lbs.

12) Repeat steps 4 through 11 on opposite side of vehicle.

13) If equipped with factory crash bar, remove nuts from front spring pivot bolts on both sides of vehicle. Install largest hole on crash bar bracket over spring pivot bolt with flat surface of the bracket containing 3 holes in a triangle pattern facing outwards and down and re-install nut. Tighten nut snug enough to keep bracket from moving freely but loose enough to reposition as needed.



14) Attach factory crash bar to new brackets and position so that it sits level on vehicle. Snug down spring pivot bolt to hold in position.

15) Use hole in bracket as guide to drill out frame. Install 1/2" x 1-3/4" bolt and hardware provided, torque to 90 ft. lbs.

16) Reinstall factory bumper over crashbar. Loosen OEM bumper side support bracket and position it to line up with hole on new crash bar bracket. Install 7/16" x 1-1/4" bolt and hardware, torque to 60 ft. lbs.

17) Replace tire/wheel assemblies. Torque lug nuts.

18) Once vehicle is on the ground torque spring to shackle nuts to 185 ft. lbs. Torque spring to hanger nuts to 259 ft. lbs.

SOME FINAL NOTES

- After completing installation, double check that all nuts and bolts are tight. Refer to torque specifications chart.
- Once vehicle is on the floor, cycle steering lock to lock and inspect steering, suspension and driveline systems for proper operation, tightness and adequate clearance. Check brake hose fitting for leaks and clearance.

TORQUE SPECIFICATIONS (Grade 8 & Class 10.9)

5/16" NUTS	20 ft. lbs.	M6	9 ft. lbs.
3/8" NUTS	35 ft. lbs.	M8	23 ft. lbs.
7/16" NUTS	60 ft. lbs.	M10	45 ft. lbs.
1/2" NUTS	90 ft. lbs.	M12	75 ft. lbs.
9/16" NUTS	160 ft. lbs.	M14	120 ft. lbs.
5/8" NUTS	175 ft. lbs.	M16	165 ft. lbs.

EXISTING HARDWARE TORQUE SPECIFICATIONS

Spring-to-spring hanger nut	259 ft. lbs.
Spring-to-shackle nut	185 ft. lbs.
Spring hanger bracket-to-frame bolts	76 ft. lbs.
Spring shackle bracket-to-frame nut	65 ft. lbs.