

6 Inch Lift System for March 1, 1999 (03/01/1999) Ford F-250 and F-350 Super Duty 4WD 2000-2004 Ford F-250 and F-350 Super Duty 4WD with Diesel and V-10 Engines

> 7 inch Lift Kit for 2000-2005 Ford Excursion 4WD with Diesel and V-10 Engines

## INSTALLATION INSTRUCTIONS

#### INTRODUCTION

Installation requires a professional mechanic. Prior to beginning, check all suspension-to-frame attaching points for stress cracks. The overall vehicle must be in excellent working condition; repair or replace all worn parts.

Read instructions several times before starting. Be sure you have all needed parts and know where they install. Read each step completely as you go.

#### NOTES:

- The rear lift includes separate installation instructions.
- Save all factory mounting hardware for reuse, unless otherwise noted.
- A factory service manual must be on hand. The manual will contain fastener torque specifications, assembly techniques, and / or special tool requirements that are unique to this particular year and model vehicle.
- Do not add or fabricate any components to gain additional suspension height.
- Prior to attaching components, be sure all surfaces are free of grit, grease, undercoating, etc.
- A torque specification in foot-pounds is shown in parenthesis "()" after each fastener.
- Use the check off box "□" found at each step to help you keep your place. Two "□□" denotes that one box is for the driver side and one is for the passenger side.

**PARTS LIST** ... The part number is stamped into each part or printed on an adhesive label. Identify each part and place the appropriate mounting hardware with it.

PART NO	DESCRIPTION (Qty if more than one)	NEW ATTACHING HARDWARE (Qty if more than one)
01-216-6	. (2) Front Leaf Spring, Diesel, V-1	0
55-07-9662	. Track Bar Bracket	
01-1112	. Pitman Arm	

	55-06-9660(2) Compression Travel Stop Extension, Rear	` '		
	55-18-9660Front Anti-Sway Bar Drop Bracket, Passenger Side			
	55-19-9660Front Anti-Sway Bar Drop	(1) 12mm x 80mm Bolt		
	Bracket, Driver Side	(1) 12mm Stover Nut		
	85140(2) Superide Shock*, Front			
	85160(2) Superide Shock*, Rear	•		
*(Note: Shock boots, if desired, purchased seperately)				
ļ	OR	(a) OL   B   ( a)     B		
	BE5-6245-H5(2) BILSTEIN Shock*, Front	` '		
	BE5-6250-H5(2) BILSTEIN Shock*, Rear	(2) Shock Boots & Hardware Pack		
	0046Decal, Superide Shock	Alcohol Wipe Pad		
	0047Decal, Superide SS Bilstein	Alcohol Wipe Pad		
	00461Decal, "Warning To Driver"			

#### **INSTALLATION PROCEDURES**

## 1) PREPARE VEHICLE...

□ Place vehicle in neutral. Raise front of vehicle and secure a jack stand beneath each frame rail, behind the front spring shackles. Ease the frame down onto the jack stands. Leave the jack under the axle to support it while the suspension is disassembled. Place transmission in low gear or "park", and chock rear tires. Remove front tires.

#### 2) REMOVE FRONT BUMPER...

- Using a clip tool or a large flat head screwdriver, disconnect the rubber splash panel from beneath the front bumper. Disconnect the block heater plug "Christmas tree" clip from the bumper (if so equipped).
- ☐ Remove the four bumper-to-frame bolts and lay the bumper aside.

#### 3) TRACK BAR / ANTI-SWAY BAR...

**NOTE:** The track bar's lower end attaches to the passenger side of the front axle. It's upper end mounts to a bracket that ties into the passenger side frame rail and the primary frame crossmember.

□ Disconnect the track bar from it's upper mounting bracket and let the bar hang. Now unbolt the bar's upper end mounting bracket.

**NOTE:** On each side, anti-sway bar links span from the sway bar body up to the frame rails.

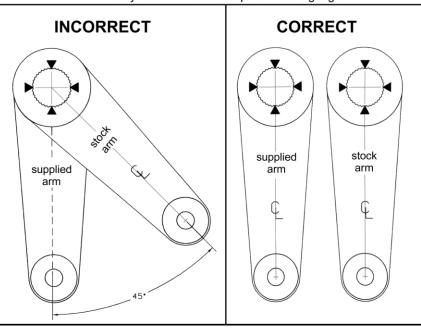
- □□ Disconnect the anti-sway bar links from their attachment points to the frame
- □□ Remove the factory shock absorbers.

NOT	<b>E:</b> On each side, a rubber compression travel stop is bolted to the bottom of the frame rail, just inboard of the shock absorbers.
	Remove the compression travel stops.
4)	FRONT LEAF SPRING REMOVAL Leaf spring removal and installation (steps 4 and 5) is performed one side at a time. Start with the driver side.
	Position the floor jack under the driver side knuckle. Load the jack so that it <u>supports</u> , not raises, the axle; the frame rail is to remain securely on the jack stand.
	Remove the two spring-to-axle U-bolts. Now remove the top U-bolt / shock plate and the bottom U-bolt cradle.
	Remove the spring shackle bolt and swing the shackle back and away from the spring.
	Unbolt the spring's front eye from its hanger, then lower the jack enough to allow spring removal.
5) □□	<b>SUPERLIFT SPRINGS</b> Apply a light coat of Lithium based grease to the spring eye bushings' ID. There is not a designated front or rear spring eye; both ends are dimensionally the same. It is easiest to insert the Superlift spring from front of vehicle.
	Position the spring eye in the front hanger and install the factory bolt from the inside, facing outward. Install factory retaining nut and hand tighten only. The bolt is fully tightened in a later step when the suspension is supporting vehicle weight.
	Position the spring onto the axle. Raise the jack and mate the rear spring eye to the shackle. Insert factory bolt from the inside, facing outward. Install factory nut and hand tighten only.
	Position top U-bolt plate, and bottom U-bolt cradle, and install the supplied large radius U-bolts. Snug-up, do not fully tighten U-bolts. As with the spring eye bolts, they are fully tightened later.
	Repeat steps 4 and 5 on passenger side.
6) □	PITMAN ARM #01-1112 Inspect all steering link ends for looseness and/or wear and replace as necessary.
	Center the steering wheel so that the tires (if they were on the vehicle), point straight ahead. <b>NOTE</b> the factory pitman arm's position in relationship to the steering box/frame.
	Remove the cotter key and jam nut on the drag link where it attaches to the pitman arm. Use a pickle fork or other suitable tool to separate the drag link.

- Remove the jam nut on the end of the sector shaft. Using a pitman arm puller tool (available at most auto parts stores), separate the pitman arm from the sector shaft.
- **IMPORTANT:** Prior to installing the dropped pitman arm, compare the spline count and indexing lugs of the stock pitman arm with the supplied pitman arm to verify the correct arm has been applicated for the vehicle. This can be accomplished by stacking the stock arm on the supplied arm (see DIAGRAM 1). The splines and indexing lugs must line up exactly. If a difference is noted (i.e. the pitman arms do not line up). contact Superlift before proceeding.

DIAGRAM 1 - COMPARING PITMAN ARMS - Compare the stock pitman arm with the supplied arm before installation.

The symbol ▲ indicates spline indexing lugs.



- Position the Superlift pitman arm (#01-1112) on the sector shaft in the exact same position as the original arm. Reinstall the factory jam nut and tighten (200)
- Reconnect the drag link to the pitman arm, install the jam nut, and tighten (67). Once the nut is torqued, install a new cotter key.

## 7) TRACK BAR BRACKET #55-07-9662...

- Install the new Superlift track bar bracket #55-**07**-9662 in the original track bar bracket location. Reuse the factory fasteners (130).
- Attach the upper end of the track bar to the **lower hole** of the "**07**" bracket using the factory hardware. Insert the bolt from front to rear and hand tighten only; the bolt is fully tightened in a later step.

## 8) SUPERLIFT FRONT SHOCK ABSORBERS (#85140 or BE5-6245-H5)...

- □□ Install shock bushings, boot, and decal.
- □□ Install the shock. Tighten the upper nut (76) and lower bolt (76).

#### 10) FRONT ANTI-SWAY BAR DROP BRACKETS #55-18-9660 AND #55-19-9660...

- Remove the factory anti-sway bar link frame brackets (where the upper end of the sway bar link attaches to the frame). Save all hardware for reuse.
- □□ Attach the Superlift anti-sway bar drop brackets (#55-18-9660 passenger side and #55-19-9660 driver side) to the frame in the same location as the original brackets using the factory hardware. Tighten to factory specs.

Attach the upper end of the factory anti-sway bar links to the "18" and "19" brackets using the supplied 12mm x 80mm bolt and 12mm stover nut. Tighten (37 lb-ft).

## 11) FRONT BUMPER...

- Reattach bumper using factory hardware.
- Reattach the rubber splash panel. Insert the block heater wiring loom "Christmas tree" plug.

# 12) FRONT BRAKE LINE BRACKET RELOCATION and INITIAL CLEARANCE CHECK...

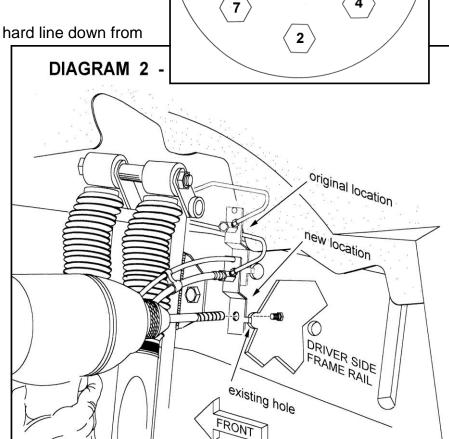
The brake line brackets are re-formed to prevent overextending the rubber hoses.

- □□ With the vehicle still on jack stands, lower the jack(s) so the suspension is "hanging" at full extension travel. On each side there is a thin metal mounting bracket at the top of the frame rail, where the rubber brake hose connects to the metal brake line. Remove the bolt securing this bracket to the frame.
- □□ [DIAGRAM 2] Carefully bend the hard line down from

the factory position as shown in the diagram. The indexing tab on the metal bracket should line up with an existing hole in the frame approximately 1-1/2 inches down from the factory position. Line up the bracket in the new location, then mark and drill the location for the new mounting hole. Attach the bracket using factory hardware and tighten to factory specs.

**WARNING:** Use extreme caution when bending the brake hard line. Avoid pinching or crimping the line, and adjust the line as necessary to avoid contact with any other components.

□□ With the suspension still hanging, cycle steering lock-to-lock and check all components for proper operation and clearances.



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**DIAGRAM 3 - LUG NUT TORQUE** 

SEQUENCE - Follow the pattern shown to torque the lug nuts.

## 13) WHEELS/TIRES...

WARNING: When a wheel is installed, always check for and remove any corrosion, dirt or foreign

material on the mounting surfaces of the wheel, or the drum / rotor surfaces that contact the

	heel. Installing wheels without proper metal-to-metal contact at the wheel mounting surfaces an cause the lug nuts to loosen and the wheel to come off while the vehicle is in motion.
	<b>NOTE:</b> Inspect the lug nut and washer assemblies. Replace the assembly if the washer portion will not spin freely.
	Position wheel / tire onto vehicle. Turn the wheel until one lug is at the top of the wheel hub bolt circle.
	Install the lug nuts loosely. Tighten the lug nuts only until snug using the lug nut tightening pattern shown in [DIAGRAM 3] to minimize runout. The lug nuts are fully tightened in a later step.
CAL	<b>TION:</b> Failure to tighten the lug nuts in the sequence shown can result in high tire and wheel runout, which speeds up the development of brake roughness, shudder and vibration.
WAF	RNING: Retighten lugs at 500 miles after any wheel change, or anytime the lug nuts are loosened. Failure to do so could cause wheels to come off while vehicle is in motion.
14)	TORQUE SPECIFICATIONS and FINAL CLEARANCE CHECK Raise vehicle and remove jack stands. Lower the vehicle to the ground so that the suspension is supporting the weight of the vehicle. Torque the following:
	<ol> <li>Spring-to-Axle U-bolts (99)</li> <li>Front Leaf Springs, Rear (Shackle) Eye (185)</li> <li>Front Leaf Springs, Front Eye (259)</li> <li>5/8" Track Bar Eye Bolt, Upper End (112)</li> <li>OR Factory Track Bar Eye Bolt, Upper End (129)</li> <li>[DIAGRAM 3] Wheel Lug Nuts (148)</li> </ol>
	Once again, cycle the steering lock-to-lock (suspension loaded) and inspect the tires / wheels, steering, suspension and brake systems for proper operation, tightness and adequate clearances.
15)	<b>REAR LIFT</b> Superlift's rear block lift and/or add-a-leafs includes its own generic installation instructions. To eliminate any possible confusion, we are verifying here that the Superlift lift blocks seat against the axle, and the factory spacers are placed on top of the Superlift blocks. Torque specification for the Superlift 5/8" diameter U-bolts and Nyloc nuts is (185).
•	REAR COMPRESSION TRAVEL STOP EXTENSIONS #55-06-9660 On each side, unbolt the factory rear compression travel stops attached to the bottom of the frame. Save the factory nut for reuse
	Attach the original compression travel stops to the #55-06-9660 extension brackets. The supplied 7/16" ID sleeve should be installed under the factory nut to compensate for the excessive stud length of the factory snubber.

	Attach the #55-06-9660 bracket to the bottom of the frame at the stop's original position using the supplied 7/16" x 1-3/4" bolt and nyloc nut. Tighten (37).
•	SUPERLIFT REAR SHOCK ABSORBERS (#85160 or BE5-6250-H5) Remove the factory shock absorber.
	The lower end of the shock is attached to bracket, which in turn, attaches to the axle tube via a U-bolt. To shorten the required shock length, loosen the U-bolt and rotate the shock attachment point up. There is a bracket locating tit on the axle tube; the bracket / U-bolt assembly will rotate up until the U-bolt makes contact with the tit. Evenly tighten the U-bolt nuts: Ford axle (35), Dana axle (46).
	Install the shock bushings, boot and decal. Install the shock. Tighten both shock eye mounts (46).
•	CLEARANCE CHECK With the vehicle on the ground, check all components for proper operation and clearances. Pay special attention to the clearance between the tires / wheels, brake hoses, wiring, etc.
<b>19)</b> □	WHEEL ALIGNMENT Realign vehicle to factory specifications. It is necessary to have a proper and professional wheel alignment performed by a certified alignment technician. Align the vehicle to factory specifications. It is recommended that your vehicle alignment be checked after any off-road driving.
•	<b>HEADLIGHTS</b> Re-adjust headlights to proper setting. In addition to your vehicle alignment, for your safety and others, it is necessary to check and adjust your vehicle headlamps for proper aim and alignment.
<b>21)</b> □	FOUR WHEEL DRIVE Activate the four wheel drive system and check for proper engagement.
22)	Install the WARNING TO DRIVER Decal Install the WARNING TO DRIVER Decal on the inside of the windshield, or on the dash, within driver's view.
	Thoroughly prep the area with the furnished alcohol wipe pad and wipe dry with a soft, lint free towel. Do not touch the surface again with your hands; they transfer body oils.

## **Important Maintenance Information**

It is the ultimate buyer's responsibility to have all bolts / nuts checked for tightness after the first 100 miles and then every 1000 miles. The steering, suspension and driveline systems, plus wheel alignment should be inspected by a qualified professional mechanic at least every 3000 miles.

## **Limited Lifetime Warranty / Warnings**

Your SUPERLIFT® product is covered by the Limited Warranty explained below that gives you specific legal rights. This limited warranty is the only warranty SUPERLIFT® makes in connection with your product purchase. SUPERLIFT® neither assumes nor authorizes any retailer or other person or entity to assume for it any other obligation or liability in connection with this product or limited warranty.

## Superlift, LLC, Limited Lifetime Warranty

What is covered? Subject to the terms below, SUPERLIFT® will repair or replace its products found defective in materials or workmanship for so long as the original purchaser owns the vehicle on which the product was originally installed. Your warrantor is SUPERLIFT, LLC, doing business as Superlift® Suspension Systems ("SUPERLIFT®").

What is not covered? Your SUPERLIFT® Limited Warranty does not cover products SUPERLIFT® determines to have been damaged by or subjected to:

- · Alteration, modification or failure to maintain.
- Normal wear and tear (bushings, rod ends, etc.). Scratches or defects in product finishes (powder coating, plating, etc.).
- Damage to, or resulting from, the vehicle's electronic stability system, related components or other vehicle systems.
- Racing or other vehicle competitions or contests. Accidents, impact by rocks, trees, obstacles or other aspects of the environment.
- Theft, vandalism or other intentional damage.

Remedy Limited to Repair or Replacement. The exclusive remedy provided hereunder shall, upon Superlift's inspection and at Superlift's option, be either repair or replacement of the product covered under this Limited Warranty. Customers requesting warranty consideration should contact SUPERLIFT® by phone (1-800-551-4955) to obtain a Returned Goods Authorization number. All removal, shipping and installation costs are customer's responsibility.

If a replacement part is needed before the SUPERLIFT® part in question can be returned, you must first purchase the replacement part. Then, if the part in question is deemed warrantable, you will be credited / refunded.

#### Other Limitations - Exclusion of Damages - Your Rights Under State Law

- Neither SUPERLIFT® nor your independent SUPERLIFT® dealer are responsible for any time loss, rental costs, or for any incidental, consequential or other damages you may have.
- This Limited Warranty gives you specific rights, and this is the only warranty SUPERLIFT® makes in connection with your product purchase. You may also have other rights that vary from state to state. For example, while all implied warranties are disclaimed herein, any implied warranty required by law is limited to the terms of our Limited Lifetime Warranty as described above. Some states do not allow limitations of how long an implied warranty lasts and / or do not allow the exclusion or limitation of incidental or consequential damages, so the limitations and exclusions herein may not apply to you. SUPERLIFT® neither assumes nor authorizes any retailer or other person or entity to assume for it any other obligation or liability in connection with this product or Limited Warranty.

#### Superlift, LLC, Satisfaction Guarantee

We want you to purchase our product with confidence and be 100% satisfied with the end result. If you have any legitimate issue, and SUPERLIFT® cannot rectify it to your satisfaction, SUPERLIFT® will take back the SUPERLIFT® brand product and refund the customer 100% of the product purchase price.

The details:

- Offer valid to the original retail consumer for six months after product purchase.
- May require a SUPERLIFT® dealer's participation in order to assist in "troubleshooting" the issue.
- Any costs related to labor, freight, incidental or consequential are not refunded.
- Refund will not exceed SUPERLIFT's published retail price.

#### Important Product Use and Safety Information / Warnings

As a general rule, the taller a vehicle is, the easier it will roll over. Offset, as much as possible, what is lost in rollover resistance by increasing tire track width. In other words, go "wide" as you go "tall"; always use as wide a tire and wheel combination as feasible to enhance vehicle stability. We strongly recommend, because of rollover possibility, that the vehicle be equipped with a functional roll bar and cage system. Seat belts and shoulder harnesses should be worn at all times. Avoid situations where a side rollover may occur.

Generally, braking performance and capabilities are decreased when significantly larger / heavier tires and wheels are used. Take this into consideration while driving. Also, changing axle gear ratios or using tires that are taller or shorter than factory height will cause an erroneous speedometer reading. On vehicles equipped with an electronic speedometer, the speed signal impacts other important functions as well. Speedometer recalibration for both mechanical and electronic types is highly recommended.

Do not add, alter, or fabricate any factory or aftermarket parts to increase vehicle height over the intended height of the SUPERLIFT® product purchased. Mixing component brands is not recommended.

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