

INSTALLATION INSTRUCTION

Part #FORD-FSRSD-004



Notice to Dealer / Consumer

Important! Read all instructions before attempting any work on the vehicle.

Disclaimer Notice: Installing this suspension system on any vehicle implies that you are in agreement with the following term and conditions with respect to that vehicle, the vehicle owner, and any or all occupants of said vehicle at any time:

- Sky Manufacturing is not responsible and cannot be held responsible for any conditions of said vehicle, including but not limited to the following: 1) Any and all adverse behavior, premature failure, or breakage caused by oversized tires and wheels, improper installation, failure to follow instructions, or any general negligence caused by installer or owner of said vehicle. 2) Any breakage or premature failure caused by racing or driver negligence. 3) Any incident determined to be caused by an increase height in said vehicle's center of gravity. 4) Any incident determined to be caused by improper installation. 5) Any incident determined to be caused by a failure of materials.
- Sky Manufacturing is to be held harmless by the installer of this suspension component, owner of said vehicle, and any parties related directly or indirectly to said vehicle or owner of said vehicle. Sky Manufacturing is to be held harmless by all parties mentioned during the course of any and all circumstances or incidence resulting from the installation of this suspension component.
- It is not the intention of Sky Manufacturing that said vehicle be modified for use on public highways sanctioned by the Department of Transportation, or any state or local governing body. Vehicle owner accepts sole responsibility for ensuring that said vehicle is not in violation of local, state, or federal laws or vehicle code. Please check local vehicle laws and regulations before modifying your vehicle.

By installing this kit or having this kit installed on your vehicle, you are implying that you agree to the above terms and conditions. Please do not install this system if you do not agree.

WARNING:

Vehicles modified for Off-road use may handle differently and vehicle may roll-over.

Vehicles modified for off-road use are generally do not improve in cornering or maneuverability on the highway, therefore it is imperative to familiarize yourself and all operators with the specific driving characteristics of the vehicle. Failure to operate in a safe and conservative manner may cause you, your passengers, and/or third parties to suffer serious injury or even death if control is lost.

Always wear your seatbelt and shoulder harness. Seatbelts not only help to protect occupants from injury but also keep the driver behind the wheel and in control when operating in rough terrain. Always remain on trails and observe conservation techniques while operating your vehicle.

Bill of Materials

Qty	Description
1	Front cross-member
1	Driver Shackle Hanger
1	Passenger Shackle Hanger
2	5/8 FSRSD Shackles
1	PanHard Drop Bracket (OPTIONAL)
1	Hardware Pack
4	Bumper Spacers

Tools Recommended:

-1-1/6, 15/16, 7/8, 13/16, 3/4 Socket and same size end wrenches

-1/2 impact gun or Breaker Bar

-Air Hammer and Large Hammer

-Straight or 90 Die Grinder

-1/2" Step or Drill Bit, Center Punch

-Torch

INSTALLATION NOTES:

- Inspect the contents of the kit and read the entire instructions before proceeding.
- We recommend this installation be performed by a qualified technician.
- We recommend using red Loctite on all bolts and Torque all hardware to factory specifications.
- Exhaust modifications may be necessary.

FORD 92-97 F-350 SuperDuty Spring 4" SHACKLE REVERSAL KIT INSTRUCTIONS

Hardware Pack

		2	18x130mm Bolts
24	1/2 x 1.5" Hex Bolts	2	18mm Nylocks
24	1/2" locknuts	2	5/8x5" Bolts
48	1/2" washers	2	5/8x5.5" Bolts
2	9/16" x 5.5" hex bolts	4	5/8" Nylocks
2	9/16" Nylocks	8	5/8" Flat Washers
4	9/16" washers	4	Shackle Bushings
2	Bushing Sleeves	2	Frame Sleeves

****These are intended for 92-97 solid axle trucks only, f-250 and 2wd, and lift springs may vary****

1. Secure Vehicle Properly with front tires off the ground, support front axle, and pinion as well.
2. Remove front bumper with a Shallow Socket and remove Upper PanHard bolt by engine cradle.



3. Check for cracks in common locations near the shackle hanger behind bumper.



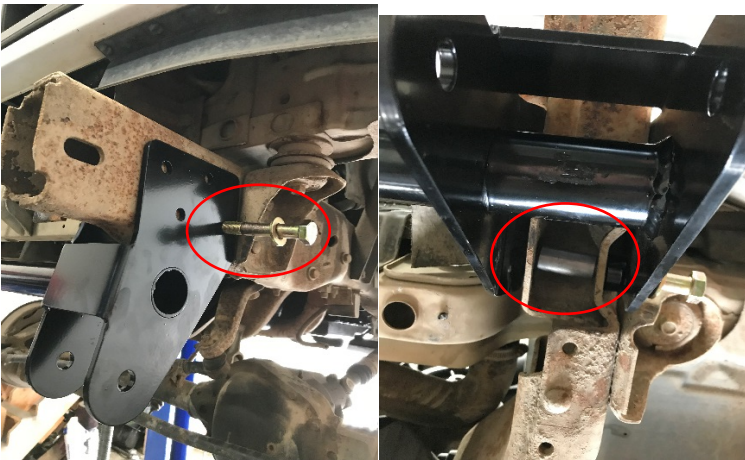
4. Remove Rear Leaf Spring Hanger Bolts (3/4 Socket) and Front Shackle (15/16 Socket)



5. Remove U-bolts (13/16 or 7/8) and take leaf springs out of truck.



6. Install new front hanger, lining up the 5/8 bolt holes in front hanger and frame. Install frame spacer into frame opening and insert 5/8x4.5" bolt through holes in frame and install nuts.

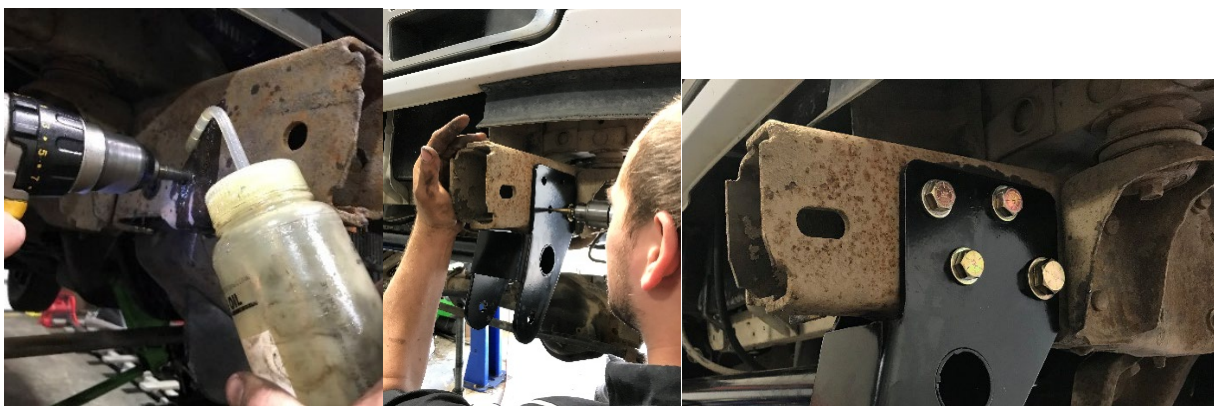


7. Measure 55.5" from center eye of factory rear spring hanger to center of new front spring bolt hole to set where the front hanger should sit.

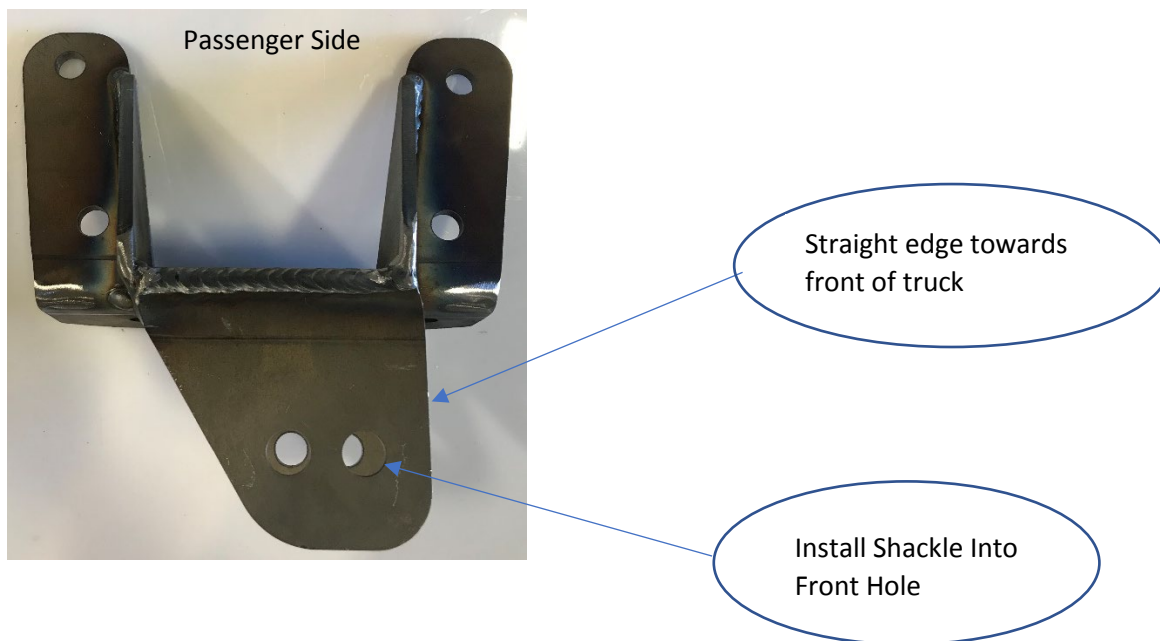
Please Note: If you are using aftermarket lift springs that do not measure out to the same length as a factory SuperDuty spring you may have to compensate for the spring being shorter or longer by rotating the front hanger forward or aft.



8. Center punch and drill 1/2" holes (on both sides of frame) in new front cross member locations as marked by the 1/2" holes in the front cross member (drilling a pilot hole and using oil and a sharp step bit will save you a massive amount of time). Install 1/2x1.5" bolts ,nuts ,and flat washers to hanger through frame. Be sure to use red Loctite and torque to specifications.



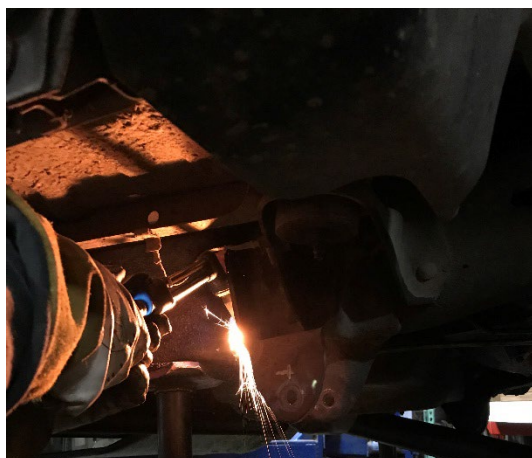
9. This next picture is displayed to show the orientation of the new shackle hangers.

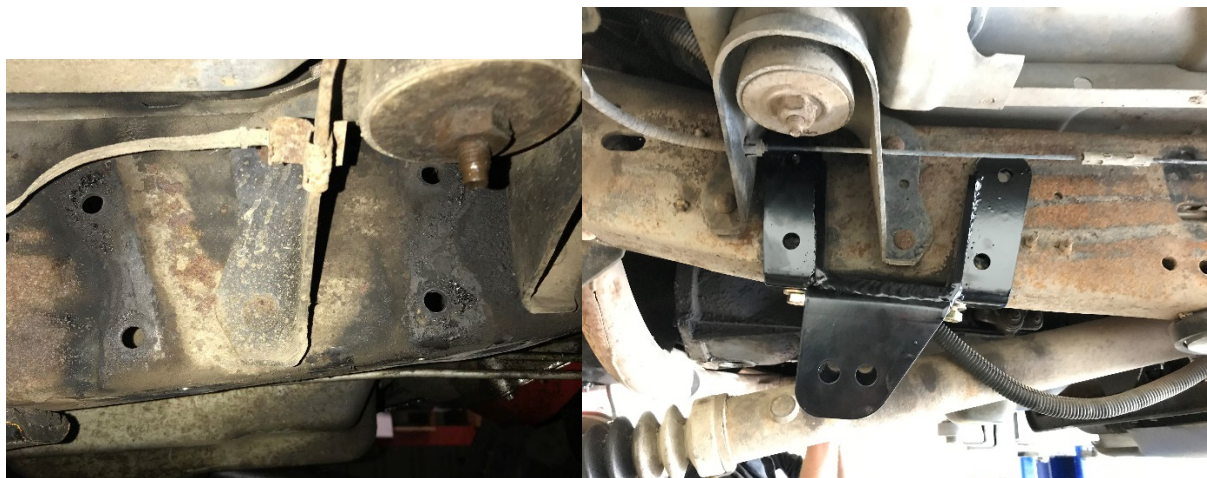


10. To install the shackle hanger you will need to remove the factory rivets; there are many ways to remove the rivets.

We recommend scarfing them off with a torch and using an air hammer to punch them out of the frame.

You can also cut an "X" into them with a cutoff wheel and punch out with a chisel or air hammer. There are many ways with some ingenuity these can be removed.





11. The holes that are in the frame are not perfect round 1/2" holes and the bolts will not fit through them. Use a 1/2" drill bit or die grinder to the bottom two holes in the frame until they fit the 1/2" bolt. Install the shackle hanger with 1/2x1.25" bolts. Tighten up the bottom bolts (3/4 socket) and you will see most of the side holes are close but don't line up perfect, generally, we take a die grinder to the holes to clearance them, install the rest of the bolts in the shackle hanger, and torque to spec.

12. Install shackle bushings and sleeves, grease liberally. After pins are installed, use 9/16x5.5" bolts to



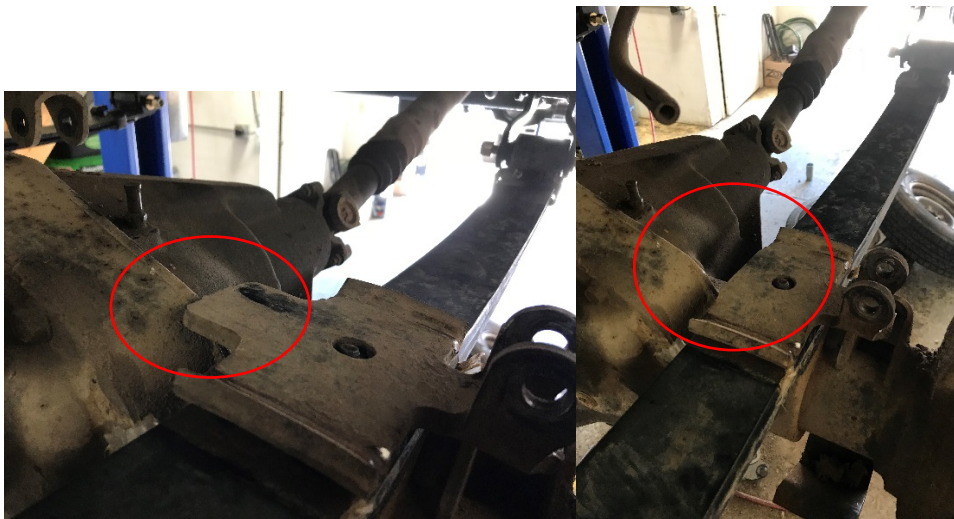
hang the shackles to the front hole of the shackle hangers. KEEP LOOSE!



13. Install 18x130mm Bolts (1-1/16 Socket) followed by the 5/8x5.5" Bolts (15/16 Socket) through the front hanger and shackle to hang your leaf springs. 18mm Spring eye w/ Military Wrap goes Forward!!!



14. Install new U-bolts (7/8 Socket) and snug up to the axle, but do not make over tight. You will most likely have to trim the U-bolt plate on the driver's side to clear the differential.



15. Set vehicle back down onto its tires, cycle the suspension to help set everything, and torque all hardware installed to spec except for PanHard parts.

16. Check to make sure brake lines are not stretched. Any lift amount over 3" it is highly recommended to install extended brakelines.

17. Front Bumper will need to use the 1/4" spacers and potentially be slightly trimmed around where the military wrap hits the bumper.

16. Remove upper PanHard bracket and install new Drop Bracket. After drop bracket is installed, hook up the new adjustable PanHard bar or install stock bar. It helps to use the steering when aligning all the holes. Simply start truck and turn left or right slightly to Align.
17. Measure your axle side to side in the truck and adjust the PanHard bar as necessary.
18. Re-torque all hardware installed after the first 50 miles. Re-Torque again at 500 miles, Check every 5000 miles after.