2005 - 2008 Ford Super Duty
4” / 6” Installation Instructions

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REQUIRED TOOL LIST:

*** Assorted Drill Bits**
*** Brake Fluid**
*** Metric and Standard wrenches and sockets**
*** Floor Jack**
*** Jack Stands**
*** Measuring Tape**
*** Pitman Arm Puller**
*** Torque Wrench**

Before beginning the installation, read these instructions and the enclosed driver’s WARNING NOTICE thoroughly and completely. Also affix the WARNING decal in passenger compartment in clear view of all occupants. If any of these items are missing from this instruction packet, do not proceed with installation, but call SKYJACKER® to obtain needed items. If you have any questions or reservations about installing this lift kit, call SKYJACKER® at 318-388-0816 for Technical Assistance or Customer Service departments.

Make sure you park the vehicle on a level concrete or asphalt surface. Many times a vehicle is uneven (side-to-side) from the factory, but usually not noticed until a lift kit has been installed which makes the difference more visible. Using a measuring tape, measure the front and rear (both sides) from the ground up to the center of the fender opening above the axle. Record below for future reference.

Driver Side Front: _____ Passenger Side Front: _____

Driver Side Rear: _____ Passenger Side Rear: _____

IMPORTANT NOTES:

- **Models Equipped with Rear Sway Bar must order Extended Rear Sway Bar End Links.**
  4” Lifts Order Part# SBE404
  6” Lifts Order Part# SBE405
- **05-07; Some Models may come equipped with a (larger) Sterling rear axle. If so, Wider U-Bolts will be required.**

4” Lifts	**6” Lifts**
U9B16R w/ Rear Blocks	**U9B18R w/ Rear Blocks**
U9B12R w/ Rear Springs	**U9B12R w/ Rear Springs**

- Please refer to Parts List to insure that all parts and hardware are received prior to disassembly of vehicle. If any parts are found to be missing, contact your dealer as soon as possible.
- If larger tires (10% more than stock) are installed, speedometer recalibration is necessary.
- This lift is determined from the front while only lifting the rear to a position level with the front.
- After installation occurs, a qualified alignment facility is required to align vehicle to factory specs.

Kit Box Breakdown:

F5451:

ITEM#	DESCRIPTION	QTY
TB540-B	TRACK BAR DROP BRACKET, 4"	1
RAB545-S	RADIUS ARM DROP BRKTS, 4"	2
SBE5054-L	EXTENDED SWAY BAR LINKS, 4" FRONT	2
BSB25-B	BUMP STOP BRACKETS, 2.5" TALL	2
7154	STEERING STABILIZER, 4"	1
CBL3401	CARRIER BEARING LOWERING KIT,4”	1
FBL54	FRONT BRAKE LINE KIT,4"	1
RB35	3.5" REAR BLOCK (NOT INCLUDED IN F5451S)	2
58X312X16	U-BOLT WITH NUTS (58X312X1012 IN F5451S)	4
HB-RABF545	HDWR BAG:RADIUS DROP BRKTS,	1
HB-5250TBS	HDWR BAG:TRK BAR,B-STOPS,SWAY BAR	1

Hardware Bag Breakdown:

HB-RABF545 **Radius Arm Drop Brackets**

ITEM#	DESCRIPTION	QTY
34X2CTB	3/4 X 2 COARSE THREAD BOLT	8
516X1FTB	5/16 X 1 FINE THREAD BOLT	2
34CTN	3/4" COARSE THREAD LOCKNUT	8
516FTN	5/16" FINE THREAD LOCKNUT	2
34SAEW	3/4 SAE WASHER	16
516SAEW	5/16 SAE WASHER	4
ABS55-S	ABS RELOCATION BRACKET	2

HB-5250TBS **Track Bar, Bump Stops, Sway Bar Links**

ITEM#	DESCRIPTION	QTY
916X112FTB	9/16 X1 1/2 FINE THREAD BOLT	2
916X3FTB	9/16 X 3 FINE THREAD BOLT	5
38X112FTB	3/8 X 1 1/2 FINE THRD BOLT	2
38X1FTB	3/8 X 1 FINE THREAD BOLT	2
916FTN	9/16-18 NYLON INSERT LOCKNUT	7
38FTN	3/8-24 FINE N/I LOCK NUT	4
916SAEW	9/16 SAE WASHERS	10
38X114FW	3/8 X 1 1/4 LARGE FENDER WASHER	2
38SAEW	3/8 SAE WASHER	4
D260PSS-S	.938” LONG ANTI CRUSH SLEEVES	3
142118	SWAY BAR END LINK SLEEVES	4
SP2016	LARGE HOURGLASS BUSHINGS	4
SBB250-B	LOWER SWAY BAR BRACKETS	2
916USSW	9/16" USS LARGE FLAT WASHER	4

F5651:

ITEM#	DESCRIPTION	QTY
TB560-B	TRACK BAR DROP BRACKET, 6"	1
RAB565-L	RADIUS DROP DOWN BRKT, DRIVER 6"	1
RAB565-R	RADIUS DROP DOWN BRKT, PASSENGER 6"	1
SBE5056-L	EXTENDED SWAY BAR LINKS, 6" FRONT	2
BSB45-B	BUMP STOP BRACKETS, 4.5" TALL	2
7156	STEERING STABILIZER, 6"	1
CBL255	CARRIER BEARING LOWERING KIT, 6”	1
FBL56	FRONT BRAKE LINE KIT, 6"	1
RB55	5.5" REAR BLOCK (NOT INCLUDED IN F5651S)	2
58X312X18	U-BOLT WITH NUTS (58X312X1012 IN F5651S)	4
HB-RABF565	HDWR BAG:RADIUS DROP BRKTS,	1
HB-5250TBS	HDWR BAG:TRK BAR,B-STOPS,SWAY BAR	1
VH32	REAR VENT HOSE - 32" LONG	1

Hardware Bag Breakdown:

HB-RABF565 **Radius Arm Drop Brackets**

ITEM#	DESCRIPTION	QTY
12x112FTB	1/2X 1 1/2 FINE THREAD BOLT	4
12FTN	1/2" FINE THREAD LOCKNUT	4
12SAEW	1/2 SAE WASHER	8
34X2CTB	3/4 X 2 COARSE THREAD BOLT	8
516X1FTB	5/16 X 1 FINE THREAD BOLT	3
34CTN	3/4" COARSE THREAD LOCKNUT	8
516FTN	5/16" FINE THREAD LOCKNUT	3
RBLE5250	REAR BRAKE EXT BRACKET 6”	1
34SAEW	3/4 SAE WASHER	16
516SAEW	5/16 SAE WASHER	5
38X114FW	3/8” LARGE FENDER WASHER	1
ABS55-S	ABS RELOCATION BRACKET	2

HB-5250TBS **Track Bar, Bump Stops, Sway Bar Links**

ITEM#	DESCRIPTION	QTY
916X112FTB	9/16 X 1 1/2 FINE THREAD BOLT	2
916X3FTB	9/16 X 3 FINE THREAD BOLT	5
38X112FTB	3/8 X 1 1/2 FINE THRD BOLT	2
38X1FTB	3/8 X 1 FINE THREAD BOLT	2
916FTN	9/16-18 NYLON INSERT LOCKNUT	5
38FTN	3/8-24 FINE N/I LOCK NUT	4
916SAEW	9/16 SAE WASHERS	10
38X114FW	3/8 X 1 1/4 LARGE FENDER WASHER	2
38SAEW	3/8 SAE WASHER	4
D260PSS-S	TRACK BAR ANTI CRUSH SLEEVES	3
142118	SWAY BAR END LINK SLEEVES	4
SP2016	LARGE HOURGLASS BUSHINGS	4
SBB5250-S	LOWER SWAY BAR BRACKETS	2
12USSW	1/2 USS LARGE FLAT WASHER	2
916USSW	9/16" USS LARGE FLAT WASHER	4

Front Installation:

1. Park the vehicle on level ground, set the emergency brake, and block the rear tires. Raise the vehicle and support frame rails using jack stands.
2. While supporting front axle with floor jack, remove tires and wheels. Remove front sway bar end links using 18mm and 21mm socket. (See Photo #1). Disconnect drag link from pitman arm. Disconnect the upper brake line bracket from the upper coil bucket and disconnect the brakeline bracket from the axle.
3. Disconnect the track bar from the track bar bracket using a 1 3/16" socket. (See Photo #2). Remove both brakeline brackets from the outside of the coil spring buckets on the frame using 10mm socket.
4. Remove the fron shocks from the vehicle. Lower the axle down so that the coil springs become loose and remove. (See Photo #3) Be sure to retain the upper rubber isolator pads, they will be used again on the new coil springs.
5. Disconnect the radius arms from the factory frame bracket using a 15/16" socket. Remove one side at a time so axle doesn't move.

6A. 6" lifts only: Notice there are 2 different radius arm drop brackets. The long side MUST go to the outside; the short side to the inside. It will be necessary to drill 2 additional bolt holes per side on the radius arm brackets using the supplied templates on page 9 & 10. Line up the bottom 2 holes on template to the factory holes on the factory bracket. Center punch the upper 2 holes that are to be drilled. (See Photo #4, Driver Side Shown) Do not drill holes until after new bracket is installed. (See Photo #5)

6B. 4" & 6" lifts: Install the new radius arm drop brackets, into the stock brackets on frame, using the 3/4 x 2" coarse thread bolts, washers, and nuts in the factory holes. Torque to 280 Ft. Lbs. The outside bolts will install from the outside in. The inner bolts install from the inside of bracket, pointing out.

6C. 6" lifts only: Using a 1/2" drill bit, now drill the holes that were center punched in step #6A. Drill completely through OEM bracket and new drop brackets. Install the 1/2 x 1 1/2" fine thread bolts washers and nuts in the 2 new locations on outside of the factory bracket. Torque to 90 Ft. Lbs.

6D. 4" & 6" lifts: Attach radius arm to new bracket using factory bolts. Torque to 280 Ft. Lbs. (See Photo #6)

7. Remove the factory track bar bracket from the frame and front crossmember using a 21mm and 18mm socket. Loosen and remove the pitman arm nut from the steering sector shaft using a 1 13/16" socket. Using a pitman arm puller, remove the pitman arm from the sector. (See Photo #7)
8. Before installing the new pitman arm, it is **EXREMELY IMPORTANT** that the following steps be followed. The dri-lock compound on the threads of the factory nut and the threads on the steering sector shaft must be thoroughly cleaned off and threads dried before applying thread locking compound.

Photo #1

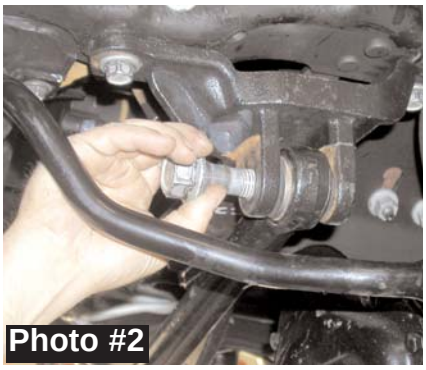


Photo #2

Photo #3

Photo #4

Photo #5

Photo #6

Photo #7

Photo #7A

Apply a heavy bead of the supplied thread locking compound all the way around the entire threads of the nut. (See Photo #7A). Once the thread locking compound has been applied, install the new pitman arm and factory nut. **Torque factory nut to 350 Ft. Lbs**!

9. Locate the new track bar relocation bracket. First bolt the new bracket to the factory location on the cross member using the 9/16 X 3" fine thread bolts, washers and nuts. Be sure to use the (3) .938" long anti crush spacers between the front of the bracket and crossmember. Do not tighten at this time. (See Photo #8)
10. Attach new track bar bracket to the frame using the (2) factory bolts. Torque all (5) track bar bracket bolts to 129 Ft. Lbs.
11. Remove the factory bump stop and bump stop cup from the frame. The mounting location on the frame and the bump stop cup must be drilled out to 3/8". (See Photo #9) Once drilled, the locator tab on top of the bump stop cup must be tapped flat so that the cup will sit flush against the bump stop relocation bracket. (See Photo #10)
12. Locate the new bump stop relocation bracket. Attach the wide end of the new bracket to the factory position on the frame. Place a 3/8" small washer on the 3/8 x 1 1/2" bolt. Install bolt through top hole in bracket, and the frame and place the large 3/8" fender washer on top of the frame and secure with a 3/8" nut. Attach the factory bump stop cup to bottom of relocation bracket using the 3/8 x 1" fine thread bolt, 1 washer, and nut. (Do Not use washer under bolt head. Tighten all bolts. Reinsert OEM bump stop into OEM bump stop cup. (See Photo #11) Note: Photo #11 shows the bracket for a 6" lift. The bracket for a 4" lift will be shorter and not have any holes on the outside of bracket.
13. Disconnect the ABS line from the factory radius arm using a 13mm wrench. Attach the new relocation bracket to the radius arm using the factory hardware. Attach the factory ABS bracket to the new extension bracket using the 5/16 x 1" fine thread bolts, washers, and nuts. (See Photo #12)
14. Remove the front brakelines from the upper bracket. Next, simply pry the lower bracket open and remove brakeline from bracket. (See Photo #13). Disconnect the front brakeline from caliper.
15. Attach the new driver side brakeline to the caliper.
    05-07 Models:*Note: Be very careful when attaching the brakeline to the caliper. The lower banjo fitting must be angled upward when attached. If not angled correctly, the brakeline will contact the body of the shock when turning.* (Driver side brakeline shown in Photo #14) Attach the brakeline to the steering knuckle with the plastic cable clamps provided, using the stock bolt at the abs mounting position. (See Photo #14A)

Photo #8

Photo #9

Photo #10

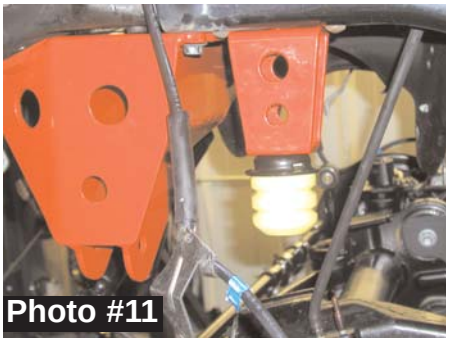


Photo #11

Photo #12

Photo #13

Photo #14

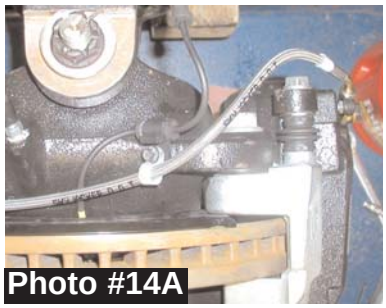


Photo #14A

16A. **05-07 Models:** Attach the drivers side brakeline bracket, with only one bend, to the driver side coil bucket using OEM bolt. Attach the factory hardline into the new stainless steel line through the hole in the new bracket. Secure new brakeline to the new bracket by inserting the brakeline clip through the groove in the new brakeline fitting (on top side of bracket). (See Photo #15) Please note that the passenger side brakeline bracket will look slightly different, but will attach the same way. (See Photo #16)

16B. **05-07 Models:** Now install the passenger side brakeline bracket using the brakeline bracket with 2 bends. Install bracket to coil bucket using OEM bolt. Install passenger side brakeline following steps #15 & #16A.

17. Install the new coil springs. Be sure to reuse the factory rubber isolator pad on top. Let weight down on the new coils at this time. (See Photo #17) Bolt the stock track bar to the new track bar bracket using the factory hardware. Torque to 280 Ft. Lbs.
Note: 08 Models, Track Bar Bracket will have 2 mounting holes for the Track Bar. 4" Kits will use the upper hole. 6" kits will use the lower mounting hole.

18. **05-07 Models:** The sway bar link lower mounts on the axle may need to be spread to allow for installation of the new lower sway bar link bracket. (See Photo #18)

19. Assemble both of the new sway bar end links. Spray the large hourglass bushings with a lubricant and install into the eyes of the sway bar end links. Insert the steel sleeves into each bushing.
05-07 Models: Place the 9/16 x 1 1/2” fine thread bolt through the new lower sway bar link bracket. (Do Not attach bracket to axle at this time.) Attach the bottom eye of the sway bar link to the new lower bracket using the 9/16 x 3” fine thread bolt, washers, and nut. Torque to 129 Ft. Lbs. **08 Models:** Simply install the new Sway Bar end links using the factory bolts.

20. **05-07 Models:** Attach this assembly to the axle housing mount by inserting the 9/16 x 1 1/2” bolt through hole in factory sway bar mount on axle. Install a 9/16 Large USS washer and nut. Torque to 280 Ft. Lbs. (See Photo #19)

21. Attach the upper eye of the sway bar links to the sway bar using the factory hardware while being sure to place the large 9/16” Large USS washer between the head of the bolt and the sway bar end link bushing. (See Photo #21)

22. Reinstall the lower factory brakeline bracket to the axle. Place the new brakeline through the lower factory bracket and shift most of the slack up, away from caliper, and recrimp the ends to hold brake line in the bracket. (See Photo #20 and #21).

Photo #15

Photo #16

Photo #17

Photo #18

Photo #19

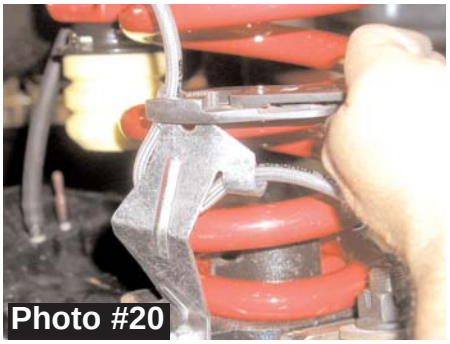


Photo #20

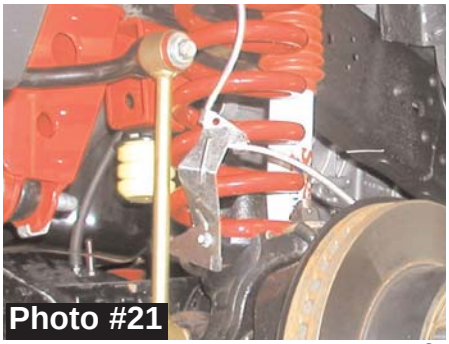


Photo #21

22A. Attach factory drag link to new pitman arm and tighten. With drag link installed, check to assure there is adequate clearance between drag link tie rod and the track bar bolt head at full left turn. If there is any contact, we recommend for the track bar bolt to be replaced with a 20mm x 90mm(3.5") bolt grade 10.9(grade 8), and use a 3/4" SAE Flat washer between the bolt head and bracket. This will provide some additional clearance if needed. (See Photo #21A)

23. Remove the factory steering stabilizer. Remove the factory bracket from the crossmember using 18mm socket. (See Photo # 22)

24. Attach the new steering stabilizer bracket to the crossmember in the factory mounting holes using the factory hardware. Install the bolts from the front. Torque to 90 Ft. Lbs.

24A. 6" lifts only: Install the 1/2 x 1 1/4" fine thread bolt, washers, and nut in the 3rd mounting hole. Torque to 90 Ft. Lbs. (See Arrow in Photo #23)

25. Install the new tapered sleeve into the factory tapered mounting hole on the drag link. With the tapered sleeve installed, insert the new tapered stud. (See Photo #24)

26. Install the new non-tapered stud into top of the new steering stabilizer bracket. Install the 5/8 hourglass bushings and boot onto the new steering stabilizer. Install the new steering stabilizer on new studs and tighten all nuts. (See Photo #25)

Rear Installation:

27. Raise rear and support securely with jack stands and block the front wheels. Remove the tires, shocks, & U-bolts. Remove vent hose from frame. (CAUTION: the rear axle will now be free to move, so support securely on floor jack.)

28. **New rear leaf spring installation:** Unbolt and remove the stock rear springs, then install the new rear springs with long end of spring towards rear bumper. (NOTE: be sure thick end of bottom degree shim is also towards rear bumper.) The factory blocks are maintained. Go to Step #30.

29. **Rear block installation:** Install the new lift blocks, taller end toward the rear bumper, between springs and original blocks (new block will be installed on top of the original block).

30. Using the floor jack, raise axle up to rear springs. Be sure the spring tie bolts and block pins all align in proper holes and are completely seated. Install and torque new u-bolts to 110 ft. lbs.

31A. 4" lifts only: Reattach vent hose, but relocate hose to the bottom of frame rail. *05-07 Models Only.*

31B. 6" lifts only: Replace original vent hose with new longer vent hose provided. Reattach vent hose, but relocate hose to the bottom of frame rail. *05-07 Models Only.*

32. Install new shocks and tires, then lower vehicle to ground. (See Photo #26)

Photo #21A

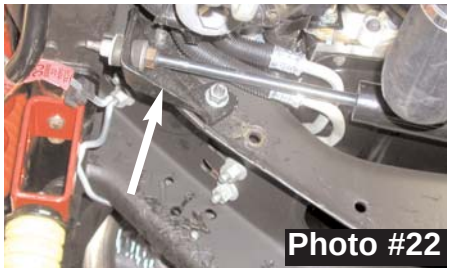


Photo #22

Photo #23

Photo #24

Photo #25

Photo #26

33. 6” lifts only: Remove the top of the brakeline from the OEM bracket. Attach new relocation bracket to hole in original brakeline bracket. Place small 5/16” washer on 5/16 x 1” bolt first. Insert bolt through new relocation bracket, then through factory upper bracket. Now place the large 3/8” Fender washer onto bolt and tighten with 5/16” nut. Reconnect OEM brakeline through hole in new relocation bracket using original clip. (See Photo #27)

Photo #27

34. 4 & 6” lifts: BLEEDING THE BRAKE SYSTEM:

A) Fill master cylinder with D.O.T. approved brake fluid.

B) Pump the brake pedal and hold down. While the pedal is down, open the bleeder nut to release air out of the system. Close or tighten nut, then let pedal up and re-pump. Continue the pumping/bleeding process until fluid is being excreted out of the bleeder nut and/or until no air is being expelled.

C) Bleed each line (6” bleed front & rear; 4” bleed front). Make sure your master cylinder is full of brake fluid after each bleeding process.

D) The brake pedal will not "pump up" or have excessive down-travel if all the air is out of the system.

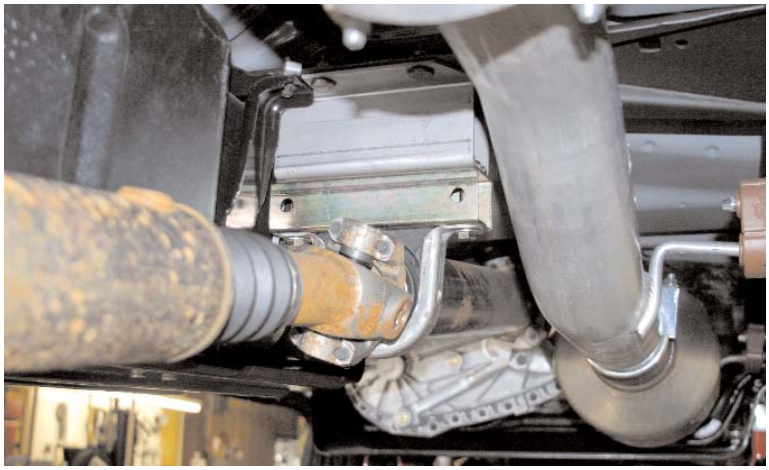
F) It is the customer's responsibility to check brake line for any leaks, abrasion, proper clearances, and brake line fittings after the first 100 miles and after every off-road activity.

FINAL NOTES:

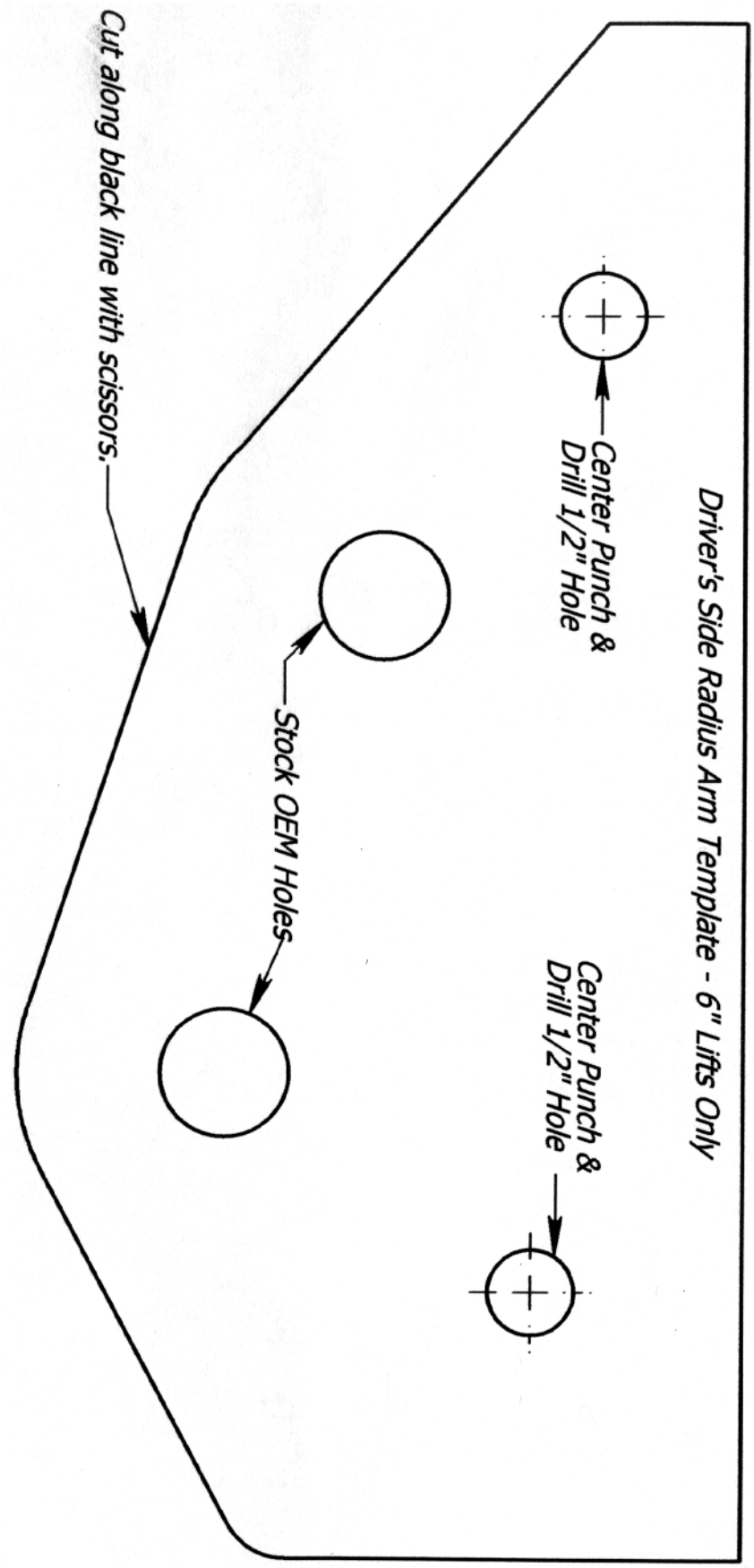
- After installation is complete, double check that all nuts and bolts are tight. (Do not retighten nuts and bolts where Thread Lock Compound was used.)
- If new tires are installed that are more than 10% taller than original tires, the speedometer must be recalibrated for the rear wheel anti-lock brake system to function properly. Contact an authorized Ford dealer for details on recalibration.
- With the vehicle on the floor, cycle steering full left & right turns. Inspect steering, suspension and driveline systems for proper operation, tightness and adequate clearance. Recheck brake hose/fittings for leaks. Be sure to check clearance between the front brakeline at the caliper and the shock.
- Have headlights readjusted to proper settings.
- Have a qualified alignment center realign front end to factory specifications.
- Re-torque all bolts after the first 100 miles. (Do not retighten nuts where Thread Lock Compound was used.)

Seat Belts Save Lives, Please Wear Your Seat Belt.

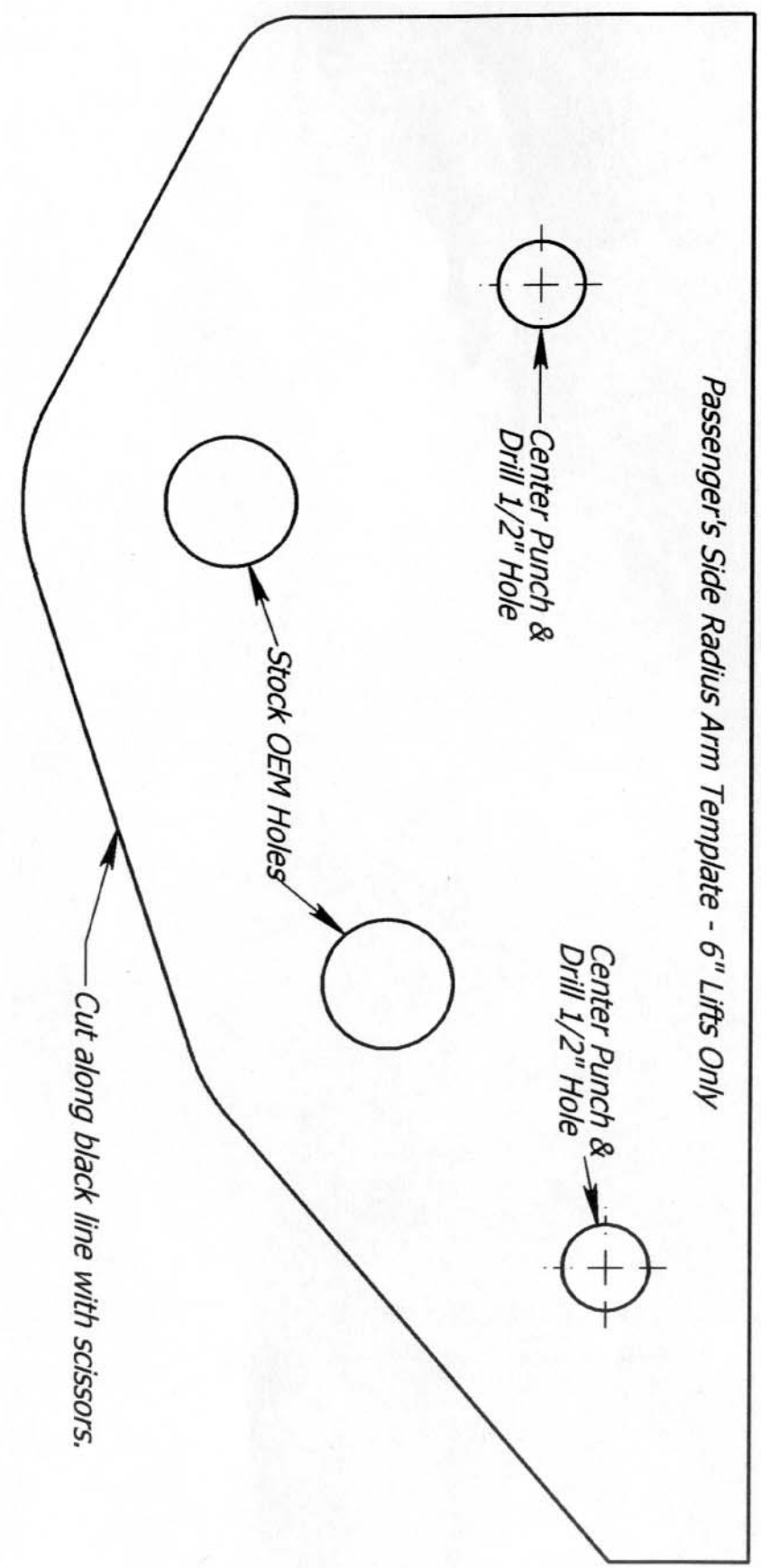
Note: On models equipped with a carrier bearing on the rear driveshaft, it will be necessary to install the supplied carrier bearing lowering bracket to help eliminate any driveline vibration. Install using the supplied 7/16” bolts and washers. Bracket will mount between the carrier bearing and the factory mount on the frame.



Radius Arm Template - 6” Lift Only
Driver’s Side



Radius Arm Template - 6” Lift Only
Passenger Side



Important Note:
After installation is completed and vehicle is on the ground with weight on the springs. Clearance must be checked between the driver side rear shock. In some situations, under acceration, the shock will contact the u-bolt that attaches the lower bracket to the axle. (See Photo #1)

Loosen the u-bolt that attaches the bracket to the axle. Rotate the shock bracket upwards so that more additional clearance is achieved between the shock body and the u-bolt. (See Photo #2)

Once in desired position, retighten the U-Bolt and torque to 90 ft. lbs. It is now recommended to tack weld the bracket to the axle tube to prevent movement of the bracket.

Photo #1

Photo #2