



# 80-96 Ford F150 / Bronco 4WD Class II 4"- 6" Suspension Lift Installation Instructions



- Safety Glasses
- Metric / Standard Wrenches & Sockets
- Floor Jack
- Jack Stands
- Measuring Tape
- Torque Wrench
- Drill & Assorted Drill Bits

Before beginning the installation, thoroughly & completely read these instructions & the enclosed driver's WARNING NOTICE. Affix the WARNING decal in the passenger compartment in clear view of all occupants. Please refer to the Parts List to insure that all parts & hardware are received prior to the disassembly of the vehicle.

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

Driver Side Front: \_\_\_\_\_ Passenger Side Front: \_\_\_\_\_

Driver Side Rear: \_\_\_\_\_ Passenger Side Rear: \_\_\_\_\_

### **IMPORTANT NOTES:**

- This lift is determined from the amount of lift to the front of the vehicle, while only lifting the rear to a position level with the front.
- If larger tires (10% more than the stock diameter) are installed, speedometer recalibration will be necessary. Contact your local Ford dealer or an authorized dealer for details.
- After installation a qualified alignment facility is required to align the vehicle to factory specifications.

## Kit Box Breakdown:

<u>Part#</u>	<u>Description</u>	<u>Qty.</u>	<u>Illustration #</u>
<b><u>286B or 286P (*284BS, 284PS, 286BS, or 286PS)</u></b>			
LHB543-5	Left axle beam pivot bracket	1	3
LHB542-5BP	Left axle beam pivot bracket doubler plate	1	3
RHB543-6	Right axle beam pivot bracket	1	4
BP125-1	Bump stop spacer	2	6
FA400	Drop pitman arm	1	
HB-2846	Hardware bag	1	
IF2846	Instruction packet	1	
<b><u>286B</u></b>			
916x314x1312U	9/16 x 3 1/4 x 11 1/2 u-bolt	4	
RB55	5.5" rear block	2	
<b><u>286P</u></b>			
916x314x1512U	9/16 x 3 1/4 x 15 1/2 u-bolt	4	
RB45	4.5" rear block	2	
<b><u>NOTE:</u></b> SYSTEMS with new rear springs do not include blocks, but included with the corresponding rear springs instead.			
<b><u>HB-2846 Hardware Bag Breakdown:</u></b>			
916X312FTB	9/16 x 3 1/2" fine thread bolt, grade 8	1	
12X112FTB	1/2 x 1 1/2" fine thread bolt, grade 8	7	
716X112FTB	7/16 x 1 1/2" fine thread bolt, grade 8	4	
516X1FTB	5/16 x 1" fine thread bolt, grade 8	2	
916FTN	9/16" fine thread lock nut (8 for rear u-bolts)	9	
12FTN	1/2" fine thread nut	7	
716FTN	7/16" fine thread nut	4	
516FTN	5/16" fine thread nut	2	
916SAEW	9/16" SAE washer	2	
12SAEW	1/2" SAE washer	14	
716SAEW	7/16" SAE washer	8	
516SAEW	5/16" SAE washer	4	
<b><u>RA150</u></b>			
RA150-L	Left radius arm	1	5
RA150-R	Right (passenger side) radius arm	1	
34STVCTN	3/4" stover course thread lock nut (shipped on arms)	2	
SAB85	Polyurethane radius arm bushing kit	1	
HB-RA150	Hardware bag	1	

### **HB-RA150 Hardware Bag Breakdown:**

12X3FTB	1/2 x 3" fine thread bolt, grade 8	2
12FTN	1/2" fine thread lock nut	2
12SAEW	1/2" SAE washer	4
716X112FTB	7/16 x 1 1/2" fine thread bolt, grade 8	8
716FTN	7/16" fine thread lock nut	8
716SAEW	7/16" SAE washer	16
2X34SW	2" x 3/4" special washer	4
LT100	Thread lock compound	1

### **FRONT INSTALLATION:**

1. Block the rear wheels of the vehicle in front & behind the tires. Raise the front of the vehicle with a floor jack & support the frame with jackstands. Remove the front wheels & shock absorbers.
2. Separate the drag link assembly from the OEM pitman arm. If your vehicle is equipped with a front anti-sway bar, remove the brackets that hold it to the frame.
3. Mark the front driveshaft & the front differential yoke so that the driveshaft can be reconnected in its OEM position. **Note:** Failure to do so may result in a driveline imbalance & subsequent vibration. Disconnect the front driveshaft at the u-joint & tape the caps to prevent them from falling off. **Note:** Be very careful not to pull the rear end of the driveshaft forward out of its splines or damage may occur to the transfer case due to improper reinstallation. Secure the end of the driveshaft up & out of the way.
4. Disconnect both front brake lines at the calipers. **Note:** Save the crush washers as they will be reused if the OEM lines are reinstalled. Hang the open ends of the brake lines as high as possible to keep the fluid from draining out. Cover the open ends of the brake lines & calipers to prevent loose dirt from entering the braking system. Disconnect the vent hose from the front differential housing.

### **PERFORM STEPS 5 THROUGH 7 ON THE PASSENGER SIDE FIRST, THEN REPEAT THEM ON DRIVER SIDE.**

5. Support the axle beam near the spindle with a floor jack. Support the beam at several points to prevent it from tipping or falling over. **Note:** The beam assemblies are very heavy so exercise caution when removing them to avoid any possibility of injury.
6. Remove the spring's lower retaining nut & washer, then remove the J-clip that holds the spring to the coil tower. (See Illustration # 5) Slowly lower the jack enough to remove the OEM coil spring.
7. Remove the center pivot bolt from the end of the axle beam. Remove the nut from the end of the radius arm towards the rear of the vehicle & carefully lower the end of the beam to the floor. **Note:** Support the front differential with a floor jack. In order to keep the beam from tipping to one side or the other, you must either chain the beam to the floor jack or use a second jack to support the beam near the spindle.

### **REPEAT STEPS 5 THROUGH 7 ON THE DRIVERS SIDE.**

8. If the vehicle is equipped with a power steering cooler line (located on front bumper side of front cross member), remove the two bolts that hold it to the front of the forward cross member. Gently move the cooler line out of the way.
9. Some of the brackets that held the pivot end of the front axle beams to the front cross member are bolted to the frame, some are riveted. These stock brackets must be removed from the cross member by unbolting or drilling out the rivet heads. A right angle drill may be necessary to drill some of the rivets. See rivet removal steps below.  
Remove the rivets as follows:
  - Center punch the rivet head.
  - Drill a 1/4" pilot hole in the center of the rivet approximately a 1/4" deep.
  - Drill the rivet head off using a 7/16" bit, being careful not to drill into the frame.
  - Drive the rivet out with a hammer & punch.
10. Remove the brackets that held the radius arms to the frame. Again, any rivets will have to be drilled out to be removed. **Note:** Be careful not to damage these OEM brackets because you will be reusing them. (See Illustration # 1)
11. The radius arm brackets removed in the previous step will be relocated **exactly 15"** toward the rear of the vehicle from their OEM location. (See Illustration # 2) **Note:** Be careful to relocate the brackets exactly 15" behind their OEM location.
12. After relocating the brackets, mark the new mounting hole locations on the frame using a center punch. **Note:** Before drilling the holes, check the inside of the frame rail for any obstructions or line interference. It may be necessary to reroute the lines on certain model vehicles if they interfere with the relocated mounting brackets. Now drill the holes using a 7/16" drill bit. Use a wire brush to remove any undercoating. The bracket must be installed on a clean surface.
13. Use a file to remove any raised edges around the hole caused by the drilling. Mount the brackets using the supplied 7/16" hardware. (See Illustration # 1) Apply thread locking compound & torque the fasteners per the Torque Specification Chart of this instruction sheet.  
  
**Note:** On later model vehicles, it may be necessary to relocate the fuel filter mounting bracket for clearance of the relocated bracket.
14. Install the left axle beam pivot drop bracket (actually located on the passenger side of cross member - to the front, # LHB543-5) & the doubler plate (# LHB542-5BP) (See Illustration # 3) The doubler plate mounts on the outside (front) of the cross member & the beam pivot drop bracket mounts on the inside of the cross member (in the OEM location). Locate the bracket & plate onto the cross member using the OEM holes & hold them in place with some of the OEM hardware, but do not tighten.
15. Mark the new holes that are needed with a center punch. (See Illustration # 3) Remove the brackets & drill the necessary 7/16" & 1/2" holes. File any raised edges. Clean the surface of any undercoating, loose paint, & etc. Install the axle beam pivot drop bracket & the doubler plate with the specified hardware furnished using thread locking compound & torque per the Torque Specification Chart. (See Illustration # 3)

16. Reinstall the power steering cooler line, if equipped, using the OEM screw & clamp. You may use the OEM hole in the double plate. (See Illustration # 3) However, make sure the lines do not rub or contact any of the bolts, bracket, or metal surfaces. It may be necessary to bend the lines or clamps slightly to clear any obstructions.
17. Install the passenger side axle beam pivot drop bracket (actually located on the driver side of cross member - to the rear, # RHB543-6). Locate the drop bracket onto the cross member. (See Illustration # 4) Mark the new holes that are needed with a center punch. (See Illustration # 4) Remove the brackets & drill the necessary 1/2" holes. File any raised edges. Clean the surface of any undercoating, loose paint, & etc. Install the axle beam pivot drop bracket with the specified hardware furnished using thread locking compound & torque per the Torque Specification Chart. (See Illustration # 4)
18. Remove the OEM radius arms from the front axle beams by removing the retaining studs from the top of the beams & the bolts from the bottom of the beams. (See Illustration # 5) Separate the new radius arms for the driver & passenger side as labeled on the arms (be sure the correct side is up). Place the new radius arms onto the appropriate axle beams & reinstall the existing top studs & lower bolts using thread locking compound & torque per the Torque Specification Chart.

### **WARNING**

THREAD LOCKING COMPOUND MUST BE APPLIED TO THE THREADS OF THE RADIUS ARM RETAINING STUD & MUST BE TORQUED TO A MINIMUM OF 180 FT. LBS.

19. Remove the OEM pitman arm from the steering box using a pitman arm puller. Failure to use the proper tool could result in damage to the steering mechanism. Install the supplied pitman arm # FA400 into position, noting the indexing marks. Torque the nut per the Torque Specification Chart.  
**Note:** The pitman arm # FA400 is for vehicles with power steering only.
20. Assemble the threaded end of the radius arms using the OEM retaining washer & the new polyurethane bushing. (See Illustration # 2)
21. Position the ends of the radius arms into the relocated brackets. Install the OEM plastic spacer, new polyurethane bushing, heat shield (if equipped), retaining washer, & new 3/4" stover nut supplied. Do not fully tighten yet.
22. Using the floor jack, raise & position one of the axle beams into the new drop bracket. Insert the existing pivot bolt through the bracket & axle beam & install the nut. (See Illustration # 3 & # 4) Do not tighten yet. Repeat this procedure on the other axle beam.
23. Check again, to make sure that all radius arm bushings & hardware is installed as was shown in Illustration # 2. Apply thread locking compound & torque the radius arm nuts to 100 ft. lbs. (**DO NOT EXCEED 100 ft. lbs. TORQUE**). Torque the axle beam pivot bolts to 180 - 220 ft. lbs.
24. Reinstall the front driveshaft & torque the u-bolts.
25. Remove the OEM bump stops from the frame. Install the OEM bump stop onto the bump stop spacers using the existing hardware. (See Illustration # 6) Mount the bump stop assembly onto the frame in the OEM location using the hardware supplied. Repeat this procedure on the other side.

26. With the floor jack still supporting the axle beam, lower the beam down enough to place the new coil into the spring seat. Install the spring's lower retaining washer & nut, then install the J-clip that holds the spring to the upper coil tower. (See Illustration # 5) Repeat this procedure on the other side.
27. Install the appropriate length brake lines at this time (also available from SKYJACKER®). Bleed the brakes to remove any air from the lines according to the OEM recommendations. Reinstall the axle vent hose.
28. If the anti-sway bar is mounted to a cross member instead of the frame rails on your vehicle, it will be necessary to trim the cross member slightly. Full scale templates are included on page # 11 of these instructions. Cut the templates out & trace them onto the crossmember. (See Illustration # 7) Remove the cross member from the anti-sway bar & trim using a scroll saw or die grinder. File any sharp or raised edges & reinstall the cross member.

For sway bar styles, other than the one listed above, SKYJACKER® offers sway bar lowering bracket kits (# SBL20 for 4" lifts & # SBL40 for 6" lifts).

29. Reinstall the anti-sway bar & reconnect the drag link assembly to the new pitman arm. Install the front shock absorbers using the hardware supplied for mounting the shocks to the new radius arm holes. (See Illustration # 5) Reinstall the tires / wheels & lower the vehicle to the ground.
30. Cycle the steering left & right from lock to lock & check for any binding or interference. There should be a minimum of 1" of clearance between the tires & the radius arms at full lock. If there is less than 1", check to make sure you have the proper wheel offset & size. If necessary, the steering stop bolts may be adjusted out to 1.25", maximum.

### **REAR INSTALLATION:**

31. Place a floor jack under the rear axle & raise the vehicle. Place jack stands under the frame to support the vehicle & remove the rear tires / wheels & shock absorbers.
32. Remove the axle u-bolts & lower the axle down a few inches. Care should be taken because when the u-bolts are removed, the axle can move freely.
33. **BLOCK INSTALLATION:** Place the new block (tallest end toward rear bumper) between the rear spring & the OEM block or degree shim, if equipped. Raise the axle up being sure that the block pins are aligned & that the spring tie bolt is aligned in the block. Install & tighten the new rear u-bolts evenly (torque u-bolts 90-95 ft.lbs.). Install the rear shock absorbers, tires / wheels, remove jack stands, & lower the vehicle down to the ground. Skip to final notes.
34. **NEW SPRING INSTALLATION:** Remove the spring eye bolts & remove the OEM springs from the vehicle. Install the new springs with the long end of the spring toward the rear bumper (also thick end of the bottom wedge shim goes toward the rear bumper, if equipped).

35. Raise the rear axle back up, aligning the spring pins into the axle housing. Install & tighten the new u-bolts evenly (torque u-bolts 90-95 ft.lbs.). Install the rear shock absorbers, tires / wheels, remove jack stands, & lower the vehicle down to the ground. Skip to final notes.

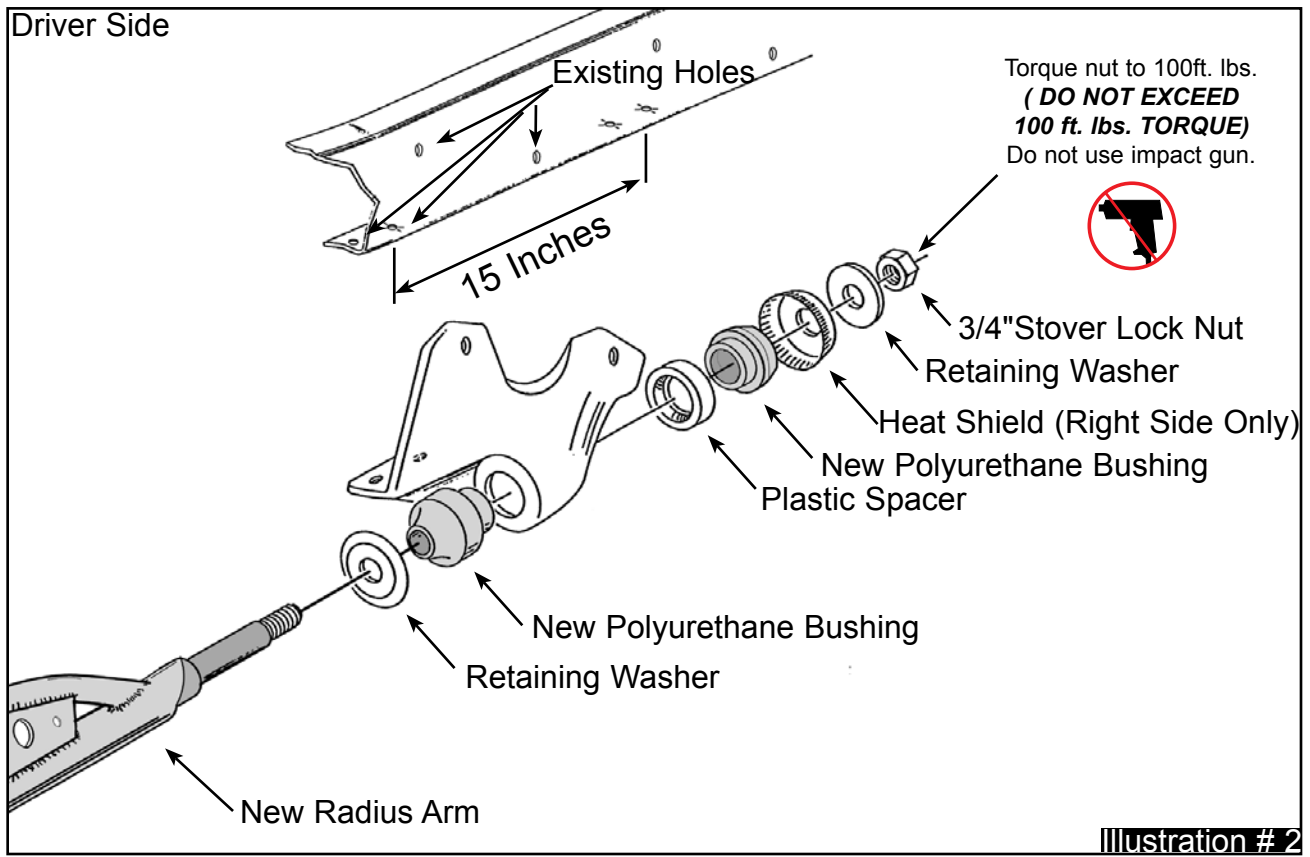
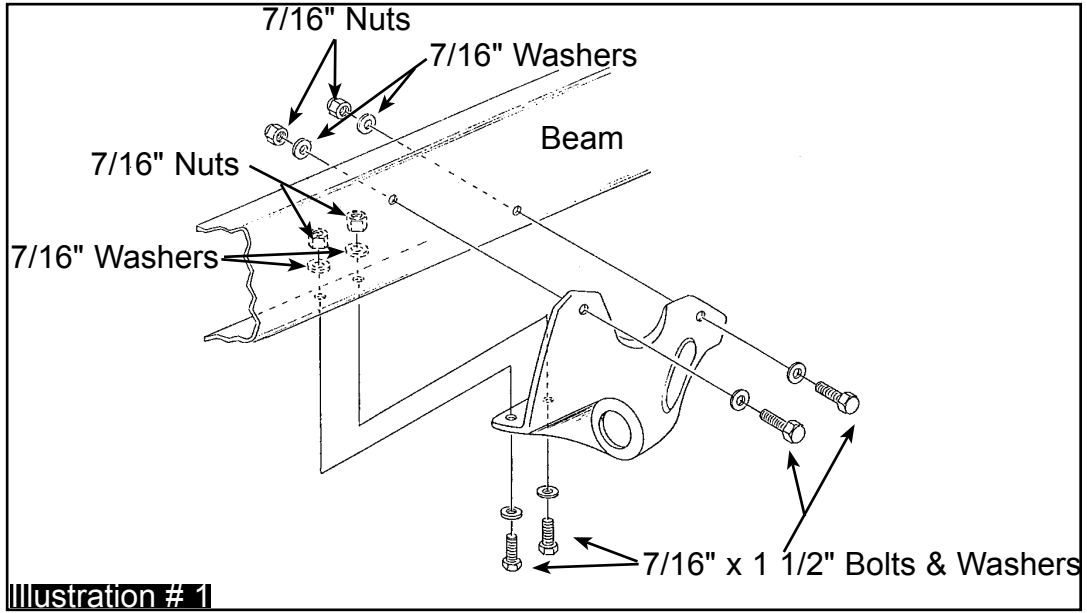
**FINAL NOTES:**

- On models with a rear carrier bearing, if a driveshaft vibration is present, the carrier bearing or its cross member must be lowered.
- After the installation is complete, double check that all nuts & bolts are tight. Refer to the following chart below for the proper torque specifications. (Do not retighten the nuts & bolts where thread lock compound was used.)
- With the vehicle placed on the ground, cycle the steering lock to lock & inspect the steering, suspension, brake lines, front & rear drivelines, fuel lines, & wiring harnesses for proper operation, tightness, & adequate clearance.
- Have the headlights readjusted to the proper settings.
- Have a qualified alignment center realign the front end to the factory specifications.
- Retorque all the bolts after the first 100 miles.

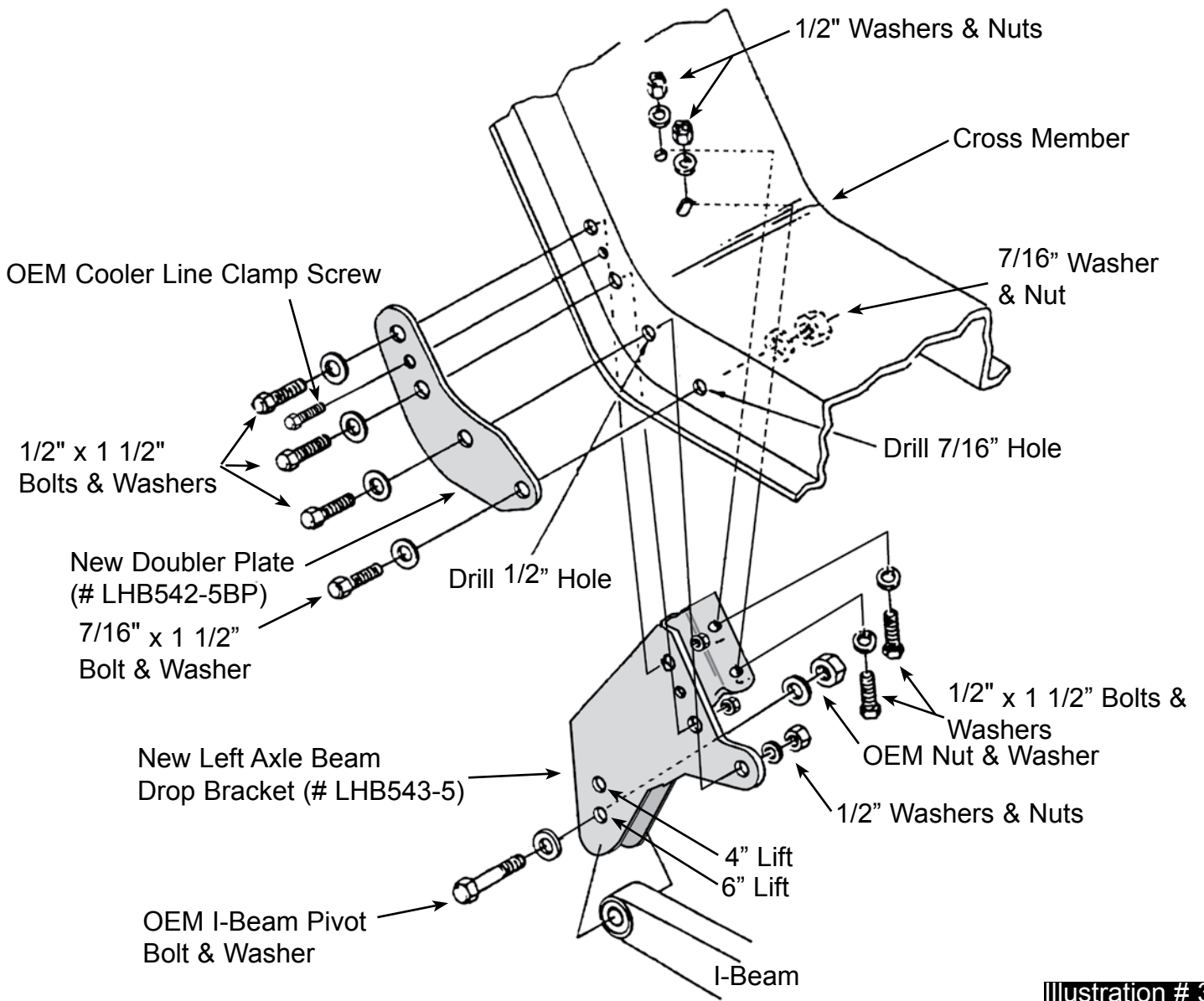
<b><u>TORQUE SPECIFICATIONS</u></b>					
<b><u>INCH SYSTEM</u></b>			<b><u>METRIC SYSTEM</u></b>		
<b>Bolt Size</b>	<b>Grade 5</b>	<b>Grade 8</b>	<b>Bolt Size</b>	<b>Class 8.8</b>	<b>Class 10.9</b>
5/16	15 FT LB	20 FT LB	6MM	5 FT LB	9 FT LB
3/8	30 FT LB	35 FT LB	8MM	18 FT LB	23 FT LB
7/16	45 FT LB	60 FT LB	10MM	32 FT LB	45 FT LB
1/2	65 FT LB	90 FT LB	12MM	55 FT LB	75 FT LB
9/16	95 FT LB	130 FT LB	14MM	85 FT LB	120 FT LB
5/8	135 FT LB	175 FT LB	16MM	130 FT LB	165 FT LB
3/4	185 FT LB	280 FT LB	18MM	170 FT LB	240 FT LB

- The above specifications are not to be used when the bolt is being installed with a bushing.

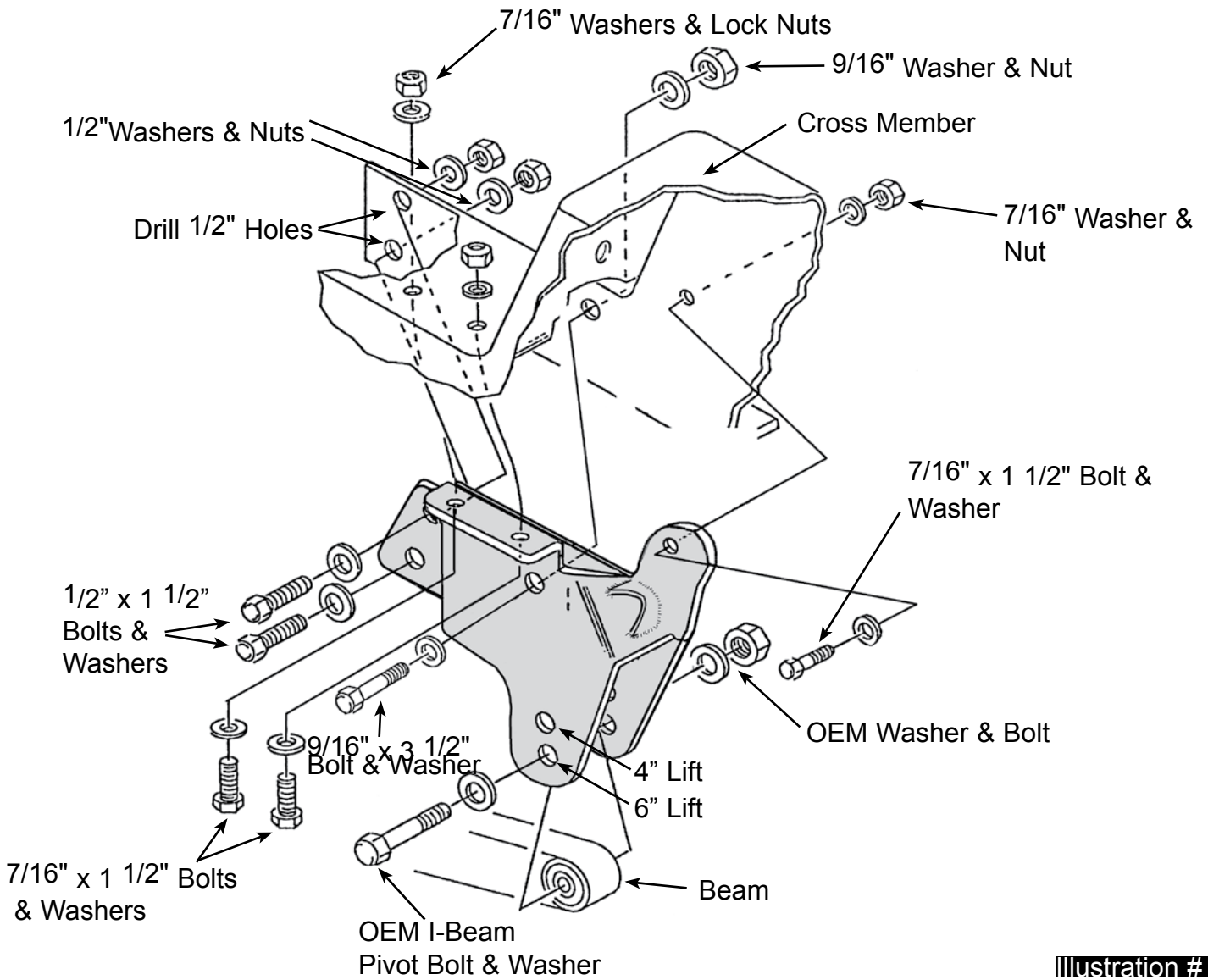
**Seat Belts Save Lives, Please Wear Your Seat Belt.**







**Illustration # 3**



**Illustration # 4**

