'99 – '04 Ford Super Duty 250/350
- 4x4, Front Axle Combo Conversion Kit

Some of the less common tools, which will be required:

- 6 point Spanner socket (OTC #7090-A or equivalent) OR 4 point Spanner socket (OTC #7158 or equivalent). These can be purchased from Dynatrac or a good auto parts store.
- Torque wrench
- Anti-Seize compound
- Heavy Duty Pitman Arm puller or equivalent (Not reqd. if stock pitman arm is already installed)
- Snap-on, 9/16 race driver, #PPC14LA to install bearing races.

Preparation, Inspection and Clearance Checks

1. Read all instructions completely. Only perform this installation if you are an experienced, fully equipped mechanic. Inspect all boxes and packing material to expose all the parts in the kit. Using the bill of material attached, verify that the kit is complete. Contact Dynatrac about any shortages. Do not start the installation until you are sure you have everything you need. Allow yourself plenty of time. You will need anywhere from 5 to 10 hours depending on your skill and experience level.

   ⚠ **WARNING: Always wear proper safety equipment including safety glasses and gloves while working with tools. Improper use of tools and equipment can cause injury or death.**

   ⚠ **WARNING: Only perform this installation if you are experienced, fully equipped mechanic.**

2. This kit has been designed to be compatible with:
   a. Most commercially available 6"-12" inch lift kits. It is not designed for stock suspensions through 4" of lift, or suspensions over 12" of lift.
   b. 16"-16.5", 8 on 170mm wheels with 4.625" of maximum backspacing.
   c. Tires up to 44" tall and 18.5" wide. Note: 18.5" wide tires mounted on 12" or narrower rims may rub against the steering drag link. Using a wider rim such as 14" may avoid this interference. See step 10 for a fitment verification procedure.

   ⚠ **WARNING: Never violate the tire manufacturers guidelines for rim compatibility.**

   d. Spring pack thickness not exceeding 4.0".

e. Avoid using angled shims between the spring pack and the axle. Using these shims will cause a critical reduction of clearance between the drag link used in this kit, and the top of the RH spring pack. The drag link must never contact or catch on the springs during any possible suspension or steering position. If you are certain that you must rotate the front axle pinion upward to relieve driveshaft angles, contact Dynatrac for alternative methods.

⚠ **WARNING: Do not use angled shims between the shim pack and the axle as it could cause the drag link to contact the springs during operation.**

3. Inspect all powder-coated parts first. Look for threaded holes that may have powder coat blocking the threads. All powder-coated parts have also been sandblasted prior to powder application for maximum adhesion. Make sure that there is no sand residue in any threaded holes. Sand residue can usually be flushed out with compressed air and/or hot soapy water. If you cannot safely remove the powder coat residue or sand without damaging the threads, then contact Dynatrac for a clean replacement part. Dynatrac cannot give any credit or refunds on damaged or abused parts.

4. Also make sure that bolts can easily be inserted into any of the through holes. It is easier to clean out some powder coat with a drill bit before the brackets are installed.

5. If your truck is ABS equipped make sure the new hubs have tone rings mounted on the short side of the new hubs.

⚠ **WARNING: If tone rings are not installed on your hubs, the ABS system will not work.**

6. Inspect the inside of the wheel hubs for any leftover debris or dirt. Wash the inside thoroughly with rags, solvent or hot soapy water. If the bearing races are not already installed in the wheel hubs, use a race driver to install them at this time. Snap-on, 9/16 race driver, #PPC14LA works great. If you don't already have one, buy it.

7. Drive or press new wheel studs supplied in the kit into the new wheel hubs at this time. The new studs should go in very tight and be fully seated.

⚠ **WARNING: DO NOT attempt to re-use the old studs. DO NOT pull the studs through with a lug nut as this will risk your safety and the safety of those around you on the highway. Improperly installed studs can cause major failures that could lead to injury or death.**

8. Raise the front axle off the ground and secure with jack stands. Remove the wheels. Remove the calipers and hang them from the frame without disconnecting the brake hoses. Remove the rotors.

⚠ **WARNING: Always use appropriate jack stands when raising your vehicle. Never work under a vehicle that is not properly secured. Be sure to chock any wheels that are on the ground.**

9. There are 2 pilot diameters machined on the outer end (long side) of the new wheel hubs. The inner pilot (larger diameter) is for the rotor and the outer pilot (next one down) locates the wheel. Make sure that the rotor and the wheel fit easily but snuggly around their respective pilot diameter.

ⓘ **INFORMATION: Trial fit all parts on both sides of the truck before assembly.**

10. **Verify Tire to Steer Arm Clearance**:
    a. Lay an inflated tire and wheel upside down on the ground so the back of the wheel is facing up.
    b. Lay a brake rotor in the wheel, and line up the stud holes.
    c. Put one of the new wheel hubs down through the rotor and the wheel until it is fully seated against the inside of the brake rotor.
    d. Take a dry (no-grease) inner bearing (387A) and drop it over one of the new fixed spindles.
    e. Then lower the spindle with the bearing, into the wheel hub so it is fully seated and spins around normally.
    f. Now lower the RH knuckle with the steering arm attached, so it seats against the flange of the spindle.
    g. Take the drag link rod end supplied with the kit (it has the longest 7/8" shank) and insert it into the tapered hole at the end of the steering arm, and put the castle nut on finger tight.
    h. Articulate the drag link end and make certain that you have at least ¼" clearance with the body of the rod end and the inner sidewall of the tire in all positions. If you do not have clearance, stop the installation and contact Dynatrac for assistance.

⚠ **WARNING: If you do not have at least ¼" clearance between the body of the rod end and the inner sidewall of the tire at all positions do not proceed with the installation! Contact DYNATRAC for assistance.**

Begin Front Axle Teardown:

11. **If truck is equipped with front ABS:** Remove the sensor and cable from the unit bearing. It is held in with only 1 screw, and pulls straight out. Tie off and out of the way. At this time make certain that the hubs included in the kit have ABS tone rings pressed on to the short side of the hub. If the hubs do not have the tone rings mounted, contact Dynatrac immediately for replacements.

⚠ **WARNING: If tone rings are not installed on your hubs, the ABS system will not work.**

⚠ **CAUTION: Be careful not to damage the ABS sensor while removing it from the unit bearing.**

12. Remove the stock locking hub. Use needle nose pliers to squeeze the snap ring tabs together. The hub is held in with the snap ring only. Wiggle and pull firmly to remove.

⚠ **CAUTION: Wear safety glasses at all times when working with tools.**

13. Remove the unit bearing assembly. It is held in with 4 nuts located on the backside of the stock knuckle. Set aside.

14. Remove the axle shaft assembly. It is only held in by tight seal tension at the differential. Use 1 or 2 pry bars between the yoke, and the end of axle housing to pull straight outward. Set aside.

15. Remove the stock tie-rod and drag link completely from the vehicle and set aside. You will later re-use the stock rod end of the drag link at the pitman arm (steering box), and the sleeve that couples the long and short ends of the tie-rod. You will also need to re-use the stock pitman arm. Use of any dropped pitman arm will create bump steer.

⚠ **CAUTION: Use of a dropped pitman arm will cause bump steer.**

16. Remove any steering stabilizers, if equipped.

17. If equipped, remove the vacuum hose that activates the auto locking hub feature, from the top of the knuckle. Plug the vacuum circuit and secure the loose end of the hose. It will no longer be used.

18. Loosen and unscrew a few turns, but do not remove the castle nut at the top knuckle ball joint. Completely remove the lock nut on the lower ball joint.

⚠ **WARNING: Do not completely remove the castle nut at the top of the knuckle ball joint; you will use it to hold the knuckle from falling on the floor while you use the sledgehammer to shake the ball joint tapers loose.**

19. Rotate the knuckle all the way out, and apply a firm downward force. Simultaneously, using a hand sledgehammer at the end of the housing, strike the tips of the steel yoke hard to shake the ball joint tapers loose. The castle nut will keep the knuckle from falling to the ground. After the ball joints are free from the housing end yoke, remove the castle nut and the knuckle. There are bronze colored, split bushings at the top ball joint. Mark them left or right and set all parts aside.

ⓘ **INFORMATION: Label the bronze colored split bushings from the top ball joint position. They are left and right sensitive. Reinstall them in their original position.**

Begin Front Axle Assembly:

20. Mount the PRO 60 Knuckles on the housing end yokes. The RH Knuckle should already have the steering arm installed. Install the split bushings for the top ball joint in the same locations (left or right) as they were before.

21. **IMPORTANT BALL JOINT TORQUE SEQUENCE** – Put upward pressure on the knuckle to push the lower ball joint into its taper hole to prevent it from spinning. Torque the lower ball joint nut to 35 ft.lbs. Then torque the upper ball joint nut to 70 ft.lbs. Continue to tighten the upper nut just enough to insert the cotter pin. Lastly, re-torque the lower ball joint nut up to a final reading of 140 to 160 ft. lbs.

    ⚠ **WARNING: Use a calibrated torque wrench on all specified bolts. Always torque bolts in the order listed.**

22. Re-torque the 4 bolts that hold the steering arm to 125 ft.lbs. DO NOT over torque or use an Air Gun. You must also check the torque of these bolts once every 2 weeks, or every 500 miles until you are certain they remain tight. Then check them once every 6 months. Replace any bolts that do not maintain torque.

    ⚠ **WARNING: Check your bolt torques per instructions and replace any bolts that do not maintain torque. Loose bolts can cause a mechanical failure that could lead to injury or death.**

23. Separate the stock outer axle shaft stubs from the stock inner axle shafts by pressing out the U-joint. Install the new 35-spline outer shafts in their place. Re-install the axle U-joint. If the old joints are suspect or worn out, this is the best time to replace them. Dynatrac stocks Spicer and other high quality joints. They can usually be shipped that same day via next day air.

    ⓘ **INFORMATION: Replace old U-Joints if they appear worn.**

24. Mount the shaft slinger, dust boot and thrust washer over the outer axle shafts as shown in **Illustration A**. The dust boot stretches over the slinger after the slinger has been pressed onto the shoulder of the yoke. The bevel side of the thrust washer goes toward the U-joint of the axle shaft.

25. Make certain that there is no loose dirt or debris inside the tubes of the axle housing. Clean out as needed.

26. Put some grease on the splines and seal surface of the inner shaft, then insert into the axle housing. Guide the shaft up into the seal and gears. Use a rubber mallet to tap the end of the shaft inward until it stops. You may have to rotate the shaft to align the splines in the differential.

27. Install the small rubber seal into the back of the spindle by the needle bearing. See **Illustration A**. The side of the seal with a small groove goes toward the axle shaft U-joint. Fill the area around the thrust washer with grease. Slide the new fixed spindle over the end of the shaft and align it with the studs protruding from the knuckle. Push the spindle on until it is fully seated with the knuckle. Install the .500-20x1.5" Allen bolts with serrated washer at the 12 o'clock position and lightly tighten. Install the ½" flat washers and stover lock nuts on the remaining studs and tighten everything to 85-90 ft.lbs in a criss-cross pattern.

   ⚠ **WARNING: Use a calibrated torque wrench on all bolts. Always torque bolts in the order listed.**

28. On the new hubs, fill the area between the races with new, quality, disc brake wheel bearing grease. Fill completely to the inside edge of the inner & outer races. Don't skimp on the grease.

29. Pack the new wheel bearings with grease. Load the inner bearing into the new hub and drive the seal into the back of the hub. Use your finger to fill the area between the lips of the seal with grease.

30. After fully packing with grease, install the new wheel hubs onto the spindles. Be careful not to damage the hub seal as it slides over the threaded end of the spindle. Push the hub onto the spindle until the inner bearing bottoms out. Push the outer bearing over the end of the spindle and into the open end of the hub. It must seat against the outer race in the wheel hub.

   ⚠ **CAUTION: Be careful not to damage the hub seal when installing it over the threaded end of the spindle.**

   ⚠ **WARNING: DO NOT use the spanner nuts to force the hub and bearings onto the spindle. If necessary, you may gently use a rubber mallet to tap the outer edge of the hub.**

31. Screw the inner spanner nut onto the end of the spindle. There are 2 types of spanner nut sets, 4 point & 6 point. On the 6-point style the inner and outer nuts are identical. On the 4 point style, the inner nut has a tiny pin which must face outward. Torque the inner nut to 50 ft.lbs while rotating the hub. Then back off the inner nut approximately 1/8 to ¼ of a turn. See page 1 for sourcing the proper hub socket. DO NOT use punches to tap the nuts around.

   ⚠ **WARNING: When installing a 4 point style spanner nut, the inner nut pin MUST face outward.**

   ⚠ **WARNING: Use the proper tools and procedure to install the spanner nuts or you may damage the bearings.**

32. **For 4 point spanner nuts only**: Align the pin on the inner nut with a hole in the lock washer. The tab on the inside of the lockwasher must align with the slot in the spindle at the same time. Be careful not to tighten or loosen the inner nut too much to achieve alignment. The hub should spin freely with no pre-load on the bearings, but not have more than .001" of end play. Only after the washer is fully seated against the inner nut, may you screw on the outer nut (has no pin). Tighten the outer nut to 70-75 ft.lbs.

33. **For 6 point spanner nuts only**: Install the star shaped lockwasher with the outer tabs pointing outward. Align the tab on the inside of the washer with the slot in the spindle. Put a coat of grease on the back of the outer spanner nut. Screw the outer spanner nut on the spindle and tighten to 65-70 ft lbs. Then bend at least one of the tabs over the front of the outer nut into one of the 6 points on the nut. The hub should spin freely with no pre-load on the bearings, but not have more than .001" of end play.

34. Install the new premium locking hubs. The gear body just slides in, and is held in place by the big internal snap ring. A second set of big internal snap rings is supplied with the kit. Install the additional snap rings over the first set. The combined thickness of both snap rings provides proper clearance**. Do not leave them out**. Then the small snap ring goes over the tip of the outer axle shaft. The cap is held on by the 6 small allen screws. Do not over tighten the small allen screws. Further instructions are included with the locking hubs. Check the hubs by locking and unlocking several times. Never use tools to turn the knobs, only bare hands. Rotate the wheel forward and backward while simultaneously turning the knob if you feel too much resistance.

⚠ WARNING: A second set of big internal snap rings is supplied with the kit. Install the additional snap rings over the first set. DO NOT leave them out.

⚠ CAUTION: Further instructions are included with the locking hubs follow them for proper installation.

⚠ CAUTION: Never use tools to turn the knob on the locking hub; it should turn without the use of a tool.

35. **ABS Equipped Only**: Insert the ABS Sensor into the mounting block on the spindle. Use the stock screw to secure it. There should be an air gap between the tone ring and the tip of the sensor between .015" and .055".

⚠ WARNING: Make sure that the ABS sensor has at least .015" clearance between the tip of the sensor and the tone ring. If the ABS sensor contacts the tone ring it can be damaged resulting in ABS system malfunction.

36. Install the stock brake rotor over the outside of the wheel hub and hold it in place with 2 lug nuts. Route the cable for the ABS sensor so it will NOT touch the inside of the rotor during vehicle operation. Secure as needed.

⚠ **WARNING: Make sure that the ABS sensor cable is secure and clear of the rotor.**

37. Put the caliper back over the rotor and note the space between the mounting bracket on the caliper and the mounting ears on the new knuckle. Each kit includes 2 sets of spacers to fill this gap. There are different rotors used on Ford Super Duties that require different thickness of spacers. Use the correct thickness of spacer and reinstall the large special bolts that hold the caliper to the ears on the knuckle. Tighten the bolts to factory specs. Spin the rotor and make certain that the caliper has adequate clearance from the brake rotor.

⚠ **WARNING: Choose the correct thickness of spacer and reinstall the large bolts that hold the caliper to the ears on the knuckle. Check for adequate clearance between the brake rotor and the caliper.**

Track Bar Installation:

38. Remove the stock bump stop or any aftermarket bump stop from left frame rail and set aside.

39. Remove the stock or aftermarket track-bar and upper track-bar bracket.

40. Remove the nut under the left motor mount. Install the cross member bracket (**see Illustration B**) supplied in the kit so that the slotted hole goes over the stud for the LH motor mount. Locate the pre-existing hole in the aft flange of the cross member and align with the other hole in the bracket. The bracket should fit fairly close into the corner of the cross member. Use a ½-20x1.5” to bolt through the end of the bracket and the aft flange of the cross member. Tighten the motor mount nut and the bolt.

41. Assemble the turnbuckles with the spherical bearings and jam nuts. Match up the RH and LH threads as required. See **Illustration C**. Make sure that equal amounts of thread are exposed on each end of the turnbuckle by holding the spherical ends in place, the turnbuckles can be lengthened and shortened by simply twisting by center by hand.

42. Remove the front shocks from both sides of the vehicle to provide room to maneuver the track bar and brackets into position.

43. Match up the holes on the upper track bar bracket (**see Illustration D**) with holes in the LH frame rail where the stock bump stop was located. Use the 9/16-18x1.5” bolt in the center and the 7/16-14x1.5” bolts on either side to secure the bracket to the frame rail.

44. Remove the U-bolts from the RH leaf spring, and set aside for re-use. Also remove the plate that sits on top of the spring pack.

45. Before assembling the track bar bushings, make sure that you can easily insert the 2.5” long steel sleeve between the flanges of the lower track bar bracket. Sometimes the powder coat on the inside of the bracket is heavy, and may need to be sanded out. When you are satisfied with the fit, assemble the track bar bushings and steel sleeves into the eyelets of the track bar.

ⓘ **INFORMATION: Use grease inside and out to prevent squeaks.**

46. If the track bar halves are screwed together, then unscrew them completely at this time. Install the 1-1/8” jam nut on the short end of the track bar and screw all the way up. Put a light coat of anti-seize on the end of the track bar threads. Insert into the long end of the track bar and screw in about half way. The length of the track bar should range between 35.5” and 36.875” for 6 – 12” lifts respectively.

47. Mount the lower track bar bracket in the kit (**Illustration. E**), on top of the RH leaf pack and fasten down with the stock U-bolts. Snug the U-bolts but do not tighten.

48. Push the eyelet on the long end of the track bar into the lower track bar bracket and insert a 3/4x4.5” bolt. Use flat washers and start the lock nut provided, but do not tighten.

49. With the normal weight of the truck on the front axle, you may now fully tighten the new RH U-bolts to 150-180 ft.lbs

⚠ **WARNING: Always chock the wheels when working under your truck, even when it is not raised.**

⚠ **WARNING: Use a calibrated torque wrench on all bolts.**

50. With the normal weight of the truck on the front axle, adjust the length of the track bar to allow the other 3/4x4.5” bolt to be inserted through the eyelet at the upper end bracket.

51. With weight still on the front axle, and the flat washers and locknuts in place, fully tighten the ¾” bolts.

52. Full droop the suspension and make sure that the track bar eyelet on the lower end of the track bar does not contact the bump plate welded above it. Note: if the track-bar makes contact, re-check with shocks in place before performing any grinding. Shorter shocks may also solve the problem.

53. This is an excellent time to put some paint on the exposed threads of the adjustable track bar.

54. Install both turnbuckles with misalignment bushings (included in kit) to the exposed ears on the upper track bar bracket (**see Illustration D**). Then locate a pre-existing hole on the forward flange of the cross member, and attach the loose end of the forward turnbuckle (**see Illustration F**). Attach the loose end of the aft turnbuckle into the bracket installed earlier on the cross member aft flange (**See Illustration G**). When stacked correctly the misalignment bushings supplied in the kit will allow spherical rod ends to not bind. Once the ends are held in place the turnbuckles can be lengthened and shortened by simply twisting by hand. Fully tighten the (4) ½" bolts that anchor the spherical rod ends.

55. By twisting, put a **very light**, but equal tension in the turnbuckles to preload the spherical bearings. Tighten the jam nuts on the spherical rod ends. Temporarily wrapping electrical tape around the hex of the turnbuckle will avoid scratches from a wrench.

56. Re-install all front shock absorbers. If dual shock equipped, use the ½-13x 7.0" bolt, and spacer sleeve provided and USS (big) ½" washers provided in the kit for the RH lower shock mount. If using a single shock, then a shorter bolt will be required (not included in kit). For single shock applications the spacer sleeve must be cut to provide 2 short spacers instead of one long spacer.

Steering Installation:

57. The stock track bar bracket welded to the axle must be cut-off or bent back out of the way. Otherwise it will interfere with the new tie-rod. The portion of the bracket used to mount the stock steering stabilizer may also be removed. Do not damage or remove the portion of the bracket that is used to hold the U-bolts.

    ⚠ **CAUTION: Be careful not to damage or remove the part of the bracket that holds the U-bolts.**

58. Disassemble the stock Tie rod. Save the clamps from the threaded sleeve.

59. Discard the bolts that are with the stock tie rod clamps. Modify the clamps as shown in **Illustration H**. Install the new 7/16-14 x 2.0" bolts with flanged locknuts into the clamps, and set aside. DO NOT use the stock bolts in the clamps. They will bottom out and fail to fully secure the tie rod ends.

    ⚠ **WARNING: Be sure to use the supplied 7/16-14 x 2.0" bolts with the tie rod clamps; the stock bolts will not fully secure the tie rod ends.**

60. Disassemble the stock drag link. Save only the rod end from the pitman arm end.

61. Make sure the stock pitman arm is installed on the steering box at this time. Using a drop pitman arm will create unwanted bump steer. Torque the big nut on the bottom of the sector shaft to factory specifications.

62. Assemble the new tie-rod as shown in **Illustration J**., but do not tighten any nuts or bolts on the tie-rod at this time. **Note:** First lightly coat the mating surfaces of the parts shown in the illustration with anti-seize. The anti-seize will make future work much less troublesome, especially in wet areas of the country.

63. Install the boots and grease fittings on the tie rod ends. Install the tie rod into the tapered holes in the knuckles, using the castle nuts, but only lightly tighten the castle nuts.

    ⚠ **WARNING: The installer MUST inject grease into all tie rod ends, drag link ends and ball joints (if equipped with fittings) before operating the vehicle. They are NOT pre-greased at the factory. Failure to do so will result in premature failure.**

64. By twisting the tie rod, adjust the toe to factory specs, or approx 1/8” to 5/32” toe-in (positive).

65. Tighten the castle nuts on the tie rod ends to 60 ft/lbs and install the cotter pins.

66. Mount the center mount for the dual steering stabilizer over the axle housing so that the forward mounting eyelets are on the centerline of the vehicle. Use the round U-bolt provided in the kit the secure it. Tighten the U-bolt to 45-55 ft.lbs. Over tightening will distort and ruin the bracket.

    ⚠ **WARNING: Over tightening the round u-bolt will distort and ruin the bracket. Use your torque wrench to achieve proper torque.**

67. Insert the steel sleeves into the (4) rubber stabilizer shock eyelets.

68. Mount the bodies of the shocks toward the center of the vehicle. Use the ½”-13x3.5” bolts, center lock nuts, and washers to fasten securely. The USS flat washers (larger diameter) should go on the outside of the shock eyelets to prevent the shocks from sliding off the rubber bushings.

69. Insert the other end of the shock into the brackets mounted on the ends of the tie rod. Use the ½”-13x2.5” bolts, center locknuts to secure.

70. Lightly tighten the 7/8” jam nuts (LH & RH threaded) at the ends of the tie rod.

71. Adjust the final positions of all 3 steering stabilizer brackets so they look even and the shock bodies will not touch the tie rod.

72. Firmly tighten the 7/8” jam nuts at the ends of the tie rod. Then fully tighten the modified, stock pinching clamps around the end of the tie-rod.

73. Slide the 2 new pinching clamps provided in the kit over the new drag link tube. Assemble the drag link using the rod end from the stock drag link at one end, and the rod end supplied in the kit (with LH threaded shank) at the other. Install the boot and grease fitting on the new rod end. Make sure equal amount of threads are showing on the shanks of both rod ends.

74. Start the engine and turn the steering wheel lock to lock, counting the number of full turns. Failure to start the engine first will result in power steering fluid being ejected from the pump. Then turn the steering box to its center point (e.g. if 4 full turns lock to lock,

then center is at the 2 turn mark). Disregard the position of the steering wheel at this time. Turn off the engine.

⚠ **WARNING: Don't turn the steering wheel from lock to lock unless the engine is running or you will cause power steering fluid to be ejected from the pump.**

75. Set the front wheels so they are pointing straight ahead.

76. Make sure the full weight of the vehicle is on the front axle. Insert the end of the drag link into the steering arm at the knuckle, and finger tight the castle nut. Adjust the length of the drag link by holding on to the other end and twisting the tube. The drag link will lengthen or shorten depending on which way it is twisted. Once it is at the appropriate length insert it into the pitman arm and finger tight the castle nut. Verify that neither the front wheels nor the steering box moved during the procedure. Correct as necessary.

77. Tighten the castle nuts and insert the cotter pins.

⚠ **WARNING: Make sure the clamps are positioned upward to prevent them from catching on the leaf spring pack while turning. Loss of vehicle control could result.**

78. Tighten the clamps.

79. Start the engine and completely cycle the steering while watching the operation of the linkage. Make certain that the stabilizer shocks do not bottom out or contact the tie rod. Make absolutely certain that no part of the drag link or tie rod will contact the leaf springs in any possible steering or suspension position, especially at full droop. Make sure all steering related fasteners are tight and the cotter pins are in place.

⚠ **WARNING: Check that absolutely no parts of the drag link or tie rod contact the leaf springs at any steering angle or suspension position.**

80. Install the stock rubber bump stops at this time. Larger aftermarket bump stops can also be used if desired.

81. Put the 8" decals provided in the kit onto the front of the steering stabilizer shocks.

82. Put the gold DYNATRAC nameplate under the 2 differential cover bolts at about the 1 o'clock and 2 o'clock position.

83. Reinstall calipers and check brakes for proper functioning. Test-drive the truck carefully.

84. **Re-checking torque on all fasteners at 100 and 500 mile intervals is absolutely necessary for safety.** Keep re-checking all bolts until torque is maintained. Especially, do not forget the following:

    a. Wheel hub endplay and lug nut torque.
    b. All U-bolts.

c. Steering arm bolts on RH knuckle.
    1. Re-torque the 4 bolts that hold the steering arm to 125 ft.lbs. DO NOT over torque or use an Air Gun. You must also check the torque of these bolts once every 2 weeks, or every 500 miles until you are certain they remain tight. Then check them once every 6 months. Replace any bolts that do not maintain torque.
d. Pitman arm to sector shaft nut.
e. Brake caliper mounting bolts.

⚠ **WARNING: Use a calibrated torque wrench on all bolts. Recheck all bolt torques at specified intervals as loose bolts can cause vehicle damage, injury, or death.**

⚠ **WARNING: The installer MUST inject grease into all tie rod ends, drag link ends and ball joints (if equipped with fittings) before operating the vehicle. They are NOT pre-greased at the factory. Failure to do so will result in premature failure.**

ILLUSTRATION A

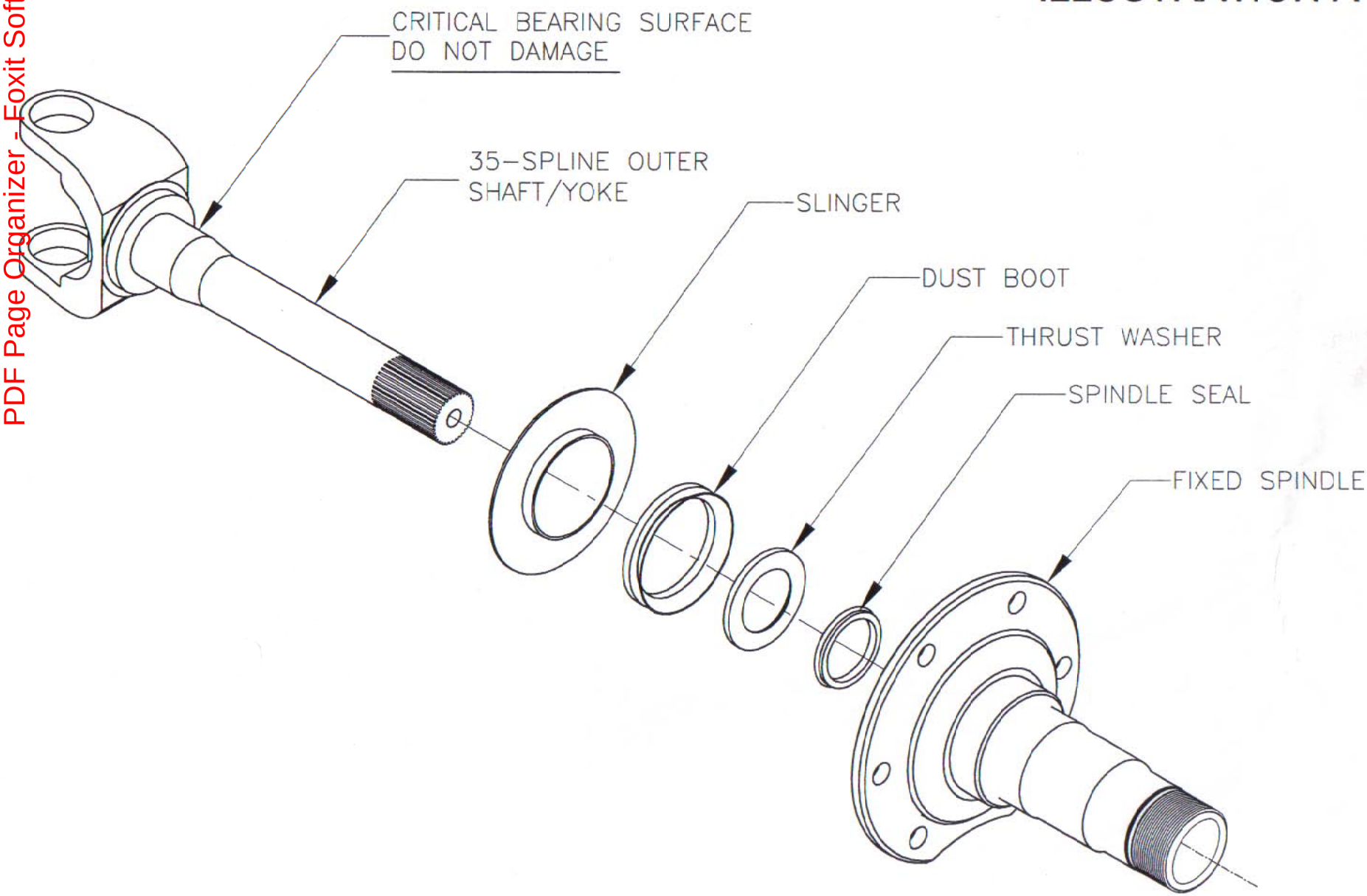
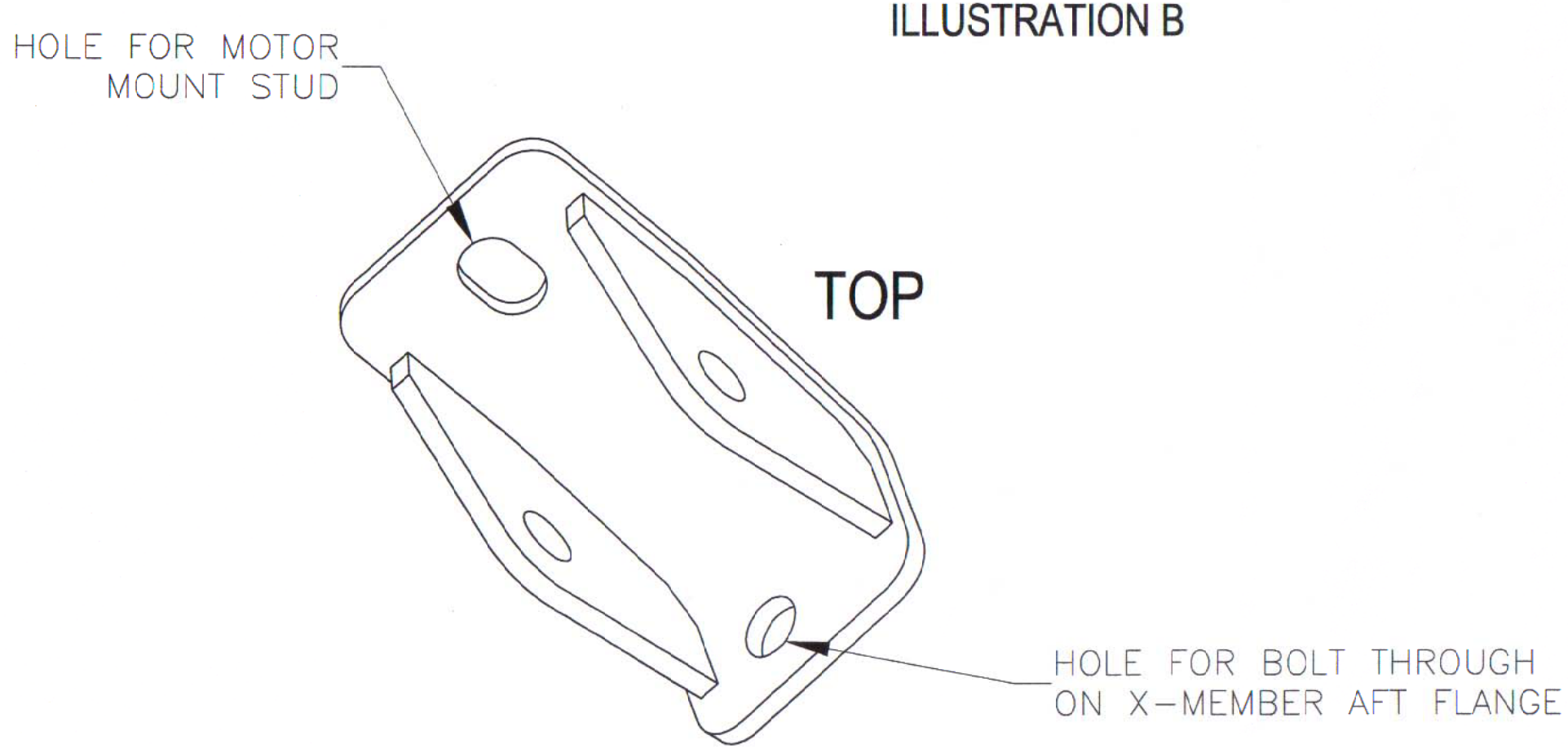


ILLUSTRATION B



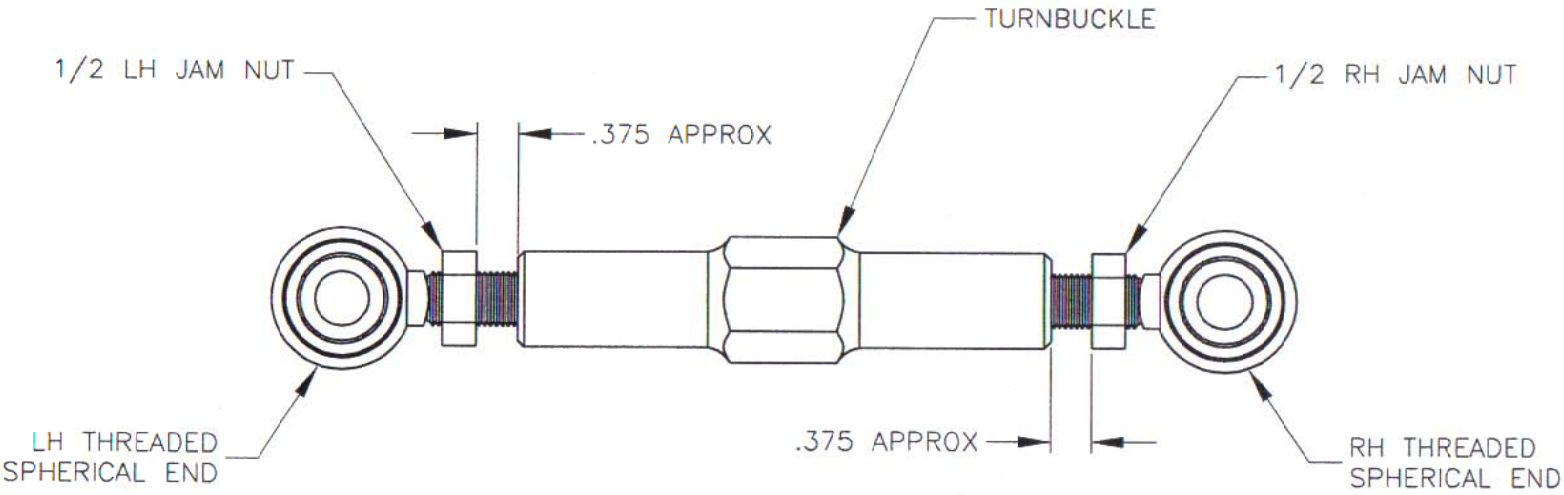


ILLUSTRATION C

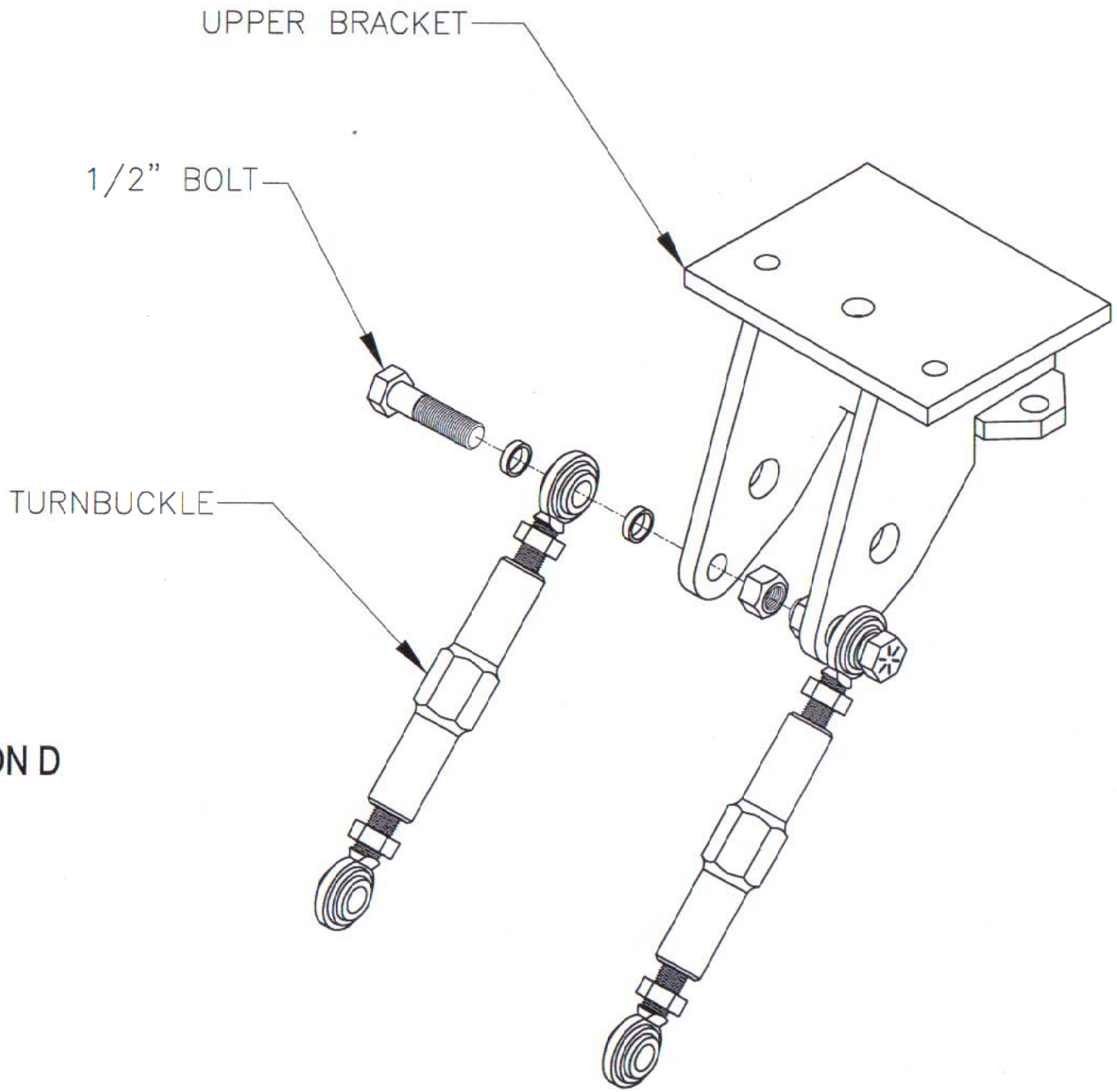


ILLUSTRATION D

ILLUSTRATION E

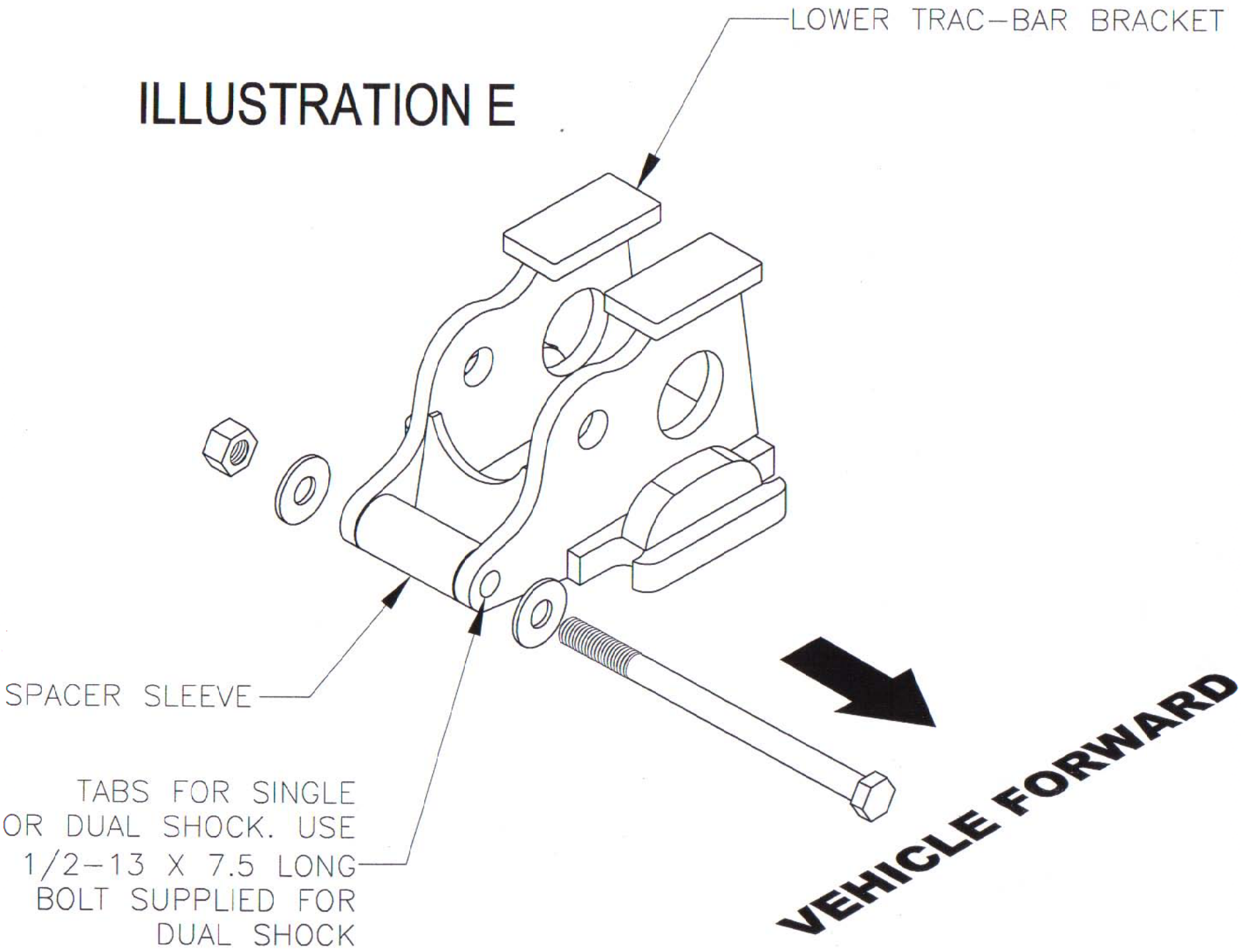


ILLUSTRATION F

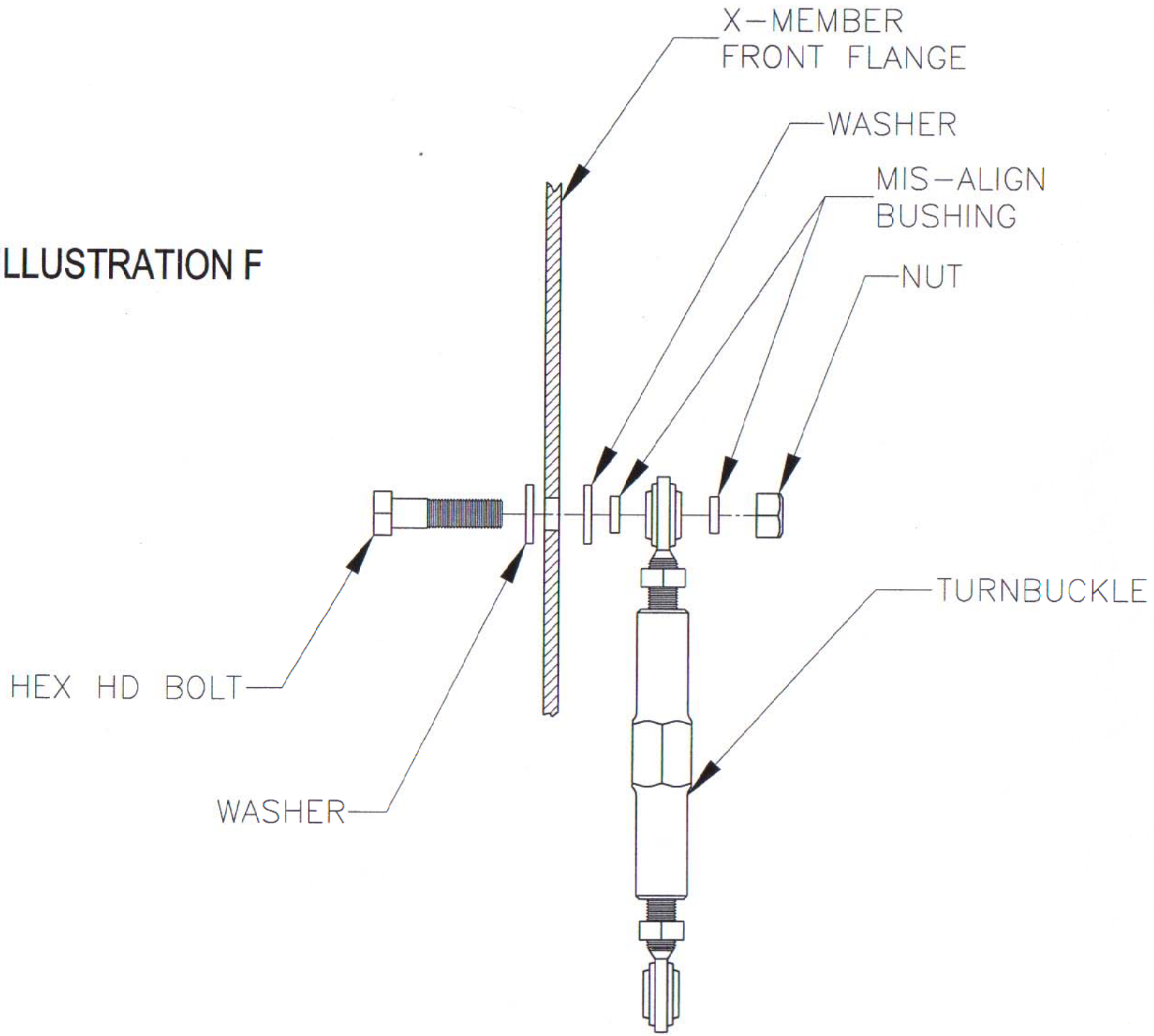
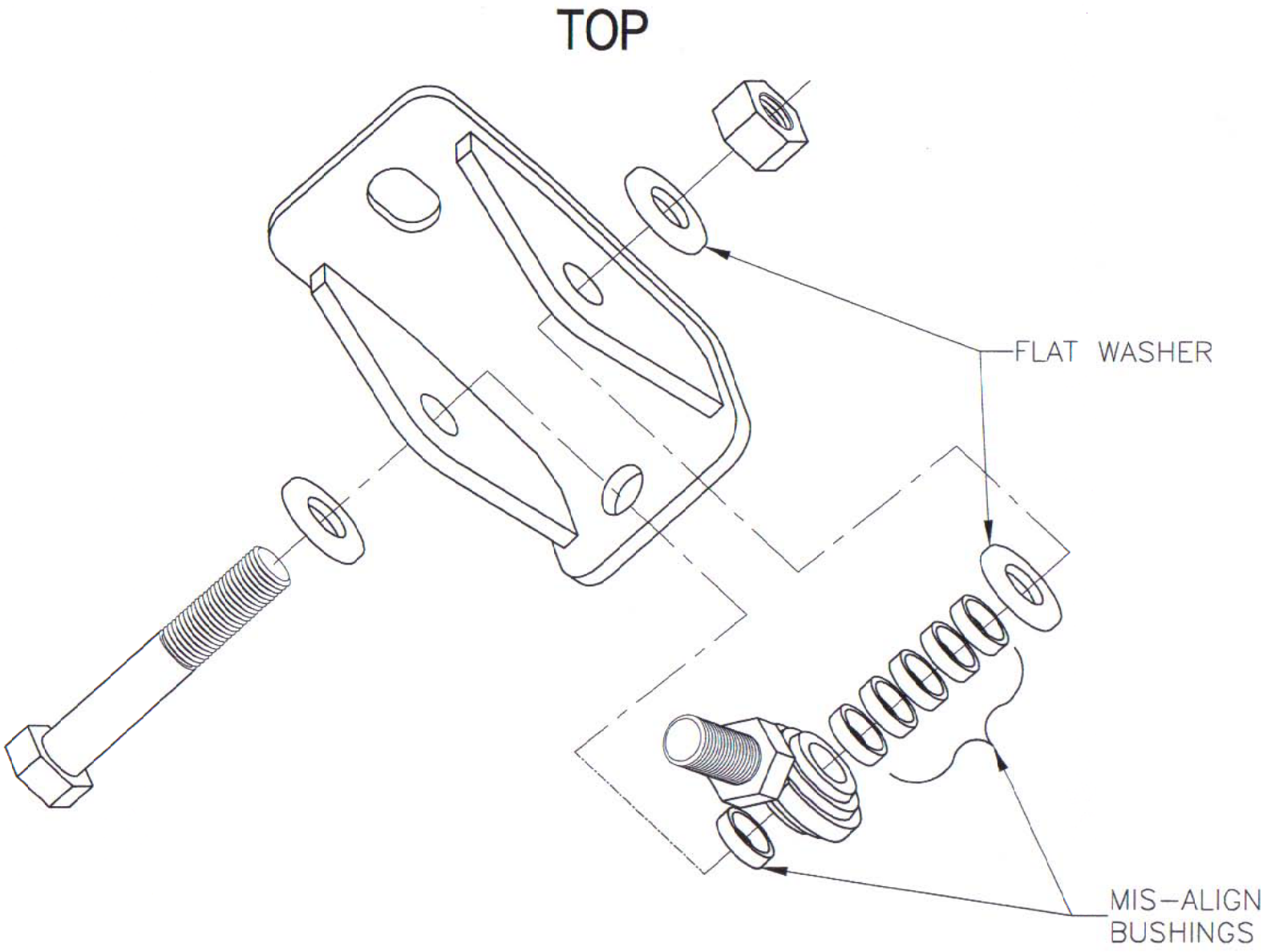


ILLUSTRATION G



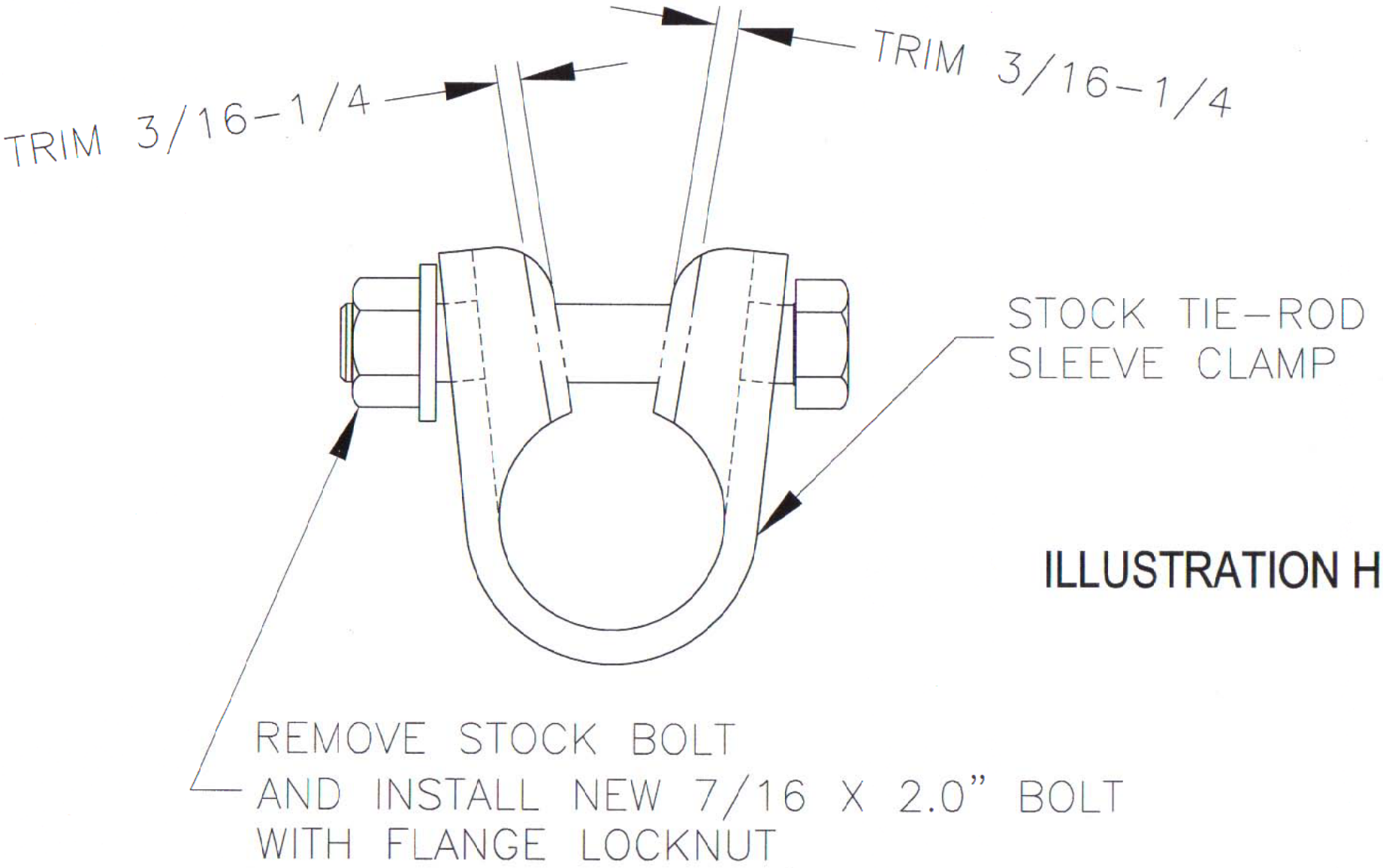


ILLUSTRATION H

ILLUSTRATION J