

BC BRONCO Rear Disk Brakes

NOTE: INSTALLATION OF THE B.C. BRONCOS REAR DISK BRAKES
SHOULD BE DONE BY A CERTIFIED MECHANIC.

Basic kit includes:

NOTE: All other parts to complete the rear disk brake install may be purchased at a full service auto parts store or may be purchased directly from BC Broncos as needed or as a complete kit.

2 - BC Broncos caliper hanger bracket (right/left)

NOTE: The caliper hanger brackets come in either "big bearing" or "small bearing" configurations.

8 - Allen mounting bolts with torque prevailing nuts

2 - Bearing spacer plates (big or small bearings configuration)

10 - Wheel studs (Bendix™ p/n _____)

2 - Shock relocating kits

Part Needed:

2 - Rear brake calipers (1979-1985 Cadillac™ Seville™ e-brake rear calipers p/n L55311 & L55312 (Bendix™)).

1 - Set 1979-1985 Cadillac™ Seville™ rear brake pads

2 - Cadillac Seville™ e-brake springs

2 - Cadillac Seville™ e-brake brackets (right/left)

2 - Cadillac Seville™ e-brake levers (right/left)

2 - E-brake bracket attaching bolts

4 - Caliper mounting bolts.

2 - Disk rotors (1980 –1986 CJ7™ rotor p/n 141257 or equiv. (Bendix™))

Note: The center hole on the disk rotors must be enlarged to 41/8" to fit over the axle bearings.

2 - Flex lines

2 - Banjo bolts

4 - Copper washers

2 - Flex/hard line mounting tabs

Special tools:

3/8" Allen wrench for the caliper attaching bolts

Flair nut wrench(s)

1" wide steel rule

Things that could be required:

Brake proportioning valve

4 wheel disk brake master cylinder

Power brake booster

INSTALL

1. Move the Bronco to a flat and level area.
2. Jack the rear axle up and support it securely on jack stands.
3. Remove the rear wheels.
4. Remove the rear shocks.
5. Remove the brake drums. Make sure the e-brake is NOT engaged.

WARNING:

Brake dust contains ASBESTOS and could be a very serious health hazard. DO NOT breath the dust that is contained in the brake drum or accumulated on the brake parts within the drum. Use caution when removing these parts and DO NOT use compressed air to blow this area clean.

NOTE:

The brake drum may be corroded to the wheel flange. If it does not come off easily, soak the center area where the axle flange joins the brake drum with Liquid Wrench™ (or equivalent) for a few hours.

6. Disconnect emergency brake cable at the e-brake lever attached to the rear brake shoe.
7. Disengage the e-brake cable casing (three finger clips) from the brake backing plate.
8. Disconnect brake line to the wheel cylinder.

WARNING:

Use rags to soak up any brake fluid that leaks out of the brake lines and wheel cylinders. Brake fluid removes paint and is toxic if swallowed.

9. Through the hole in the axle wheel flange, remove the 4 bolts and nuts that secure the brake backing plates to the axle flange. See Figure 1.
10. Remove brake backing plate assembly. It will not be necessary to remove any brake hardware from the backing plate.
11. If new e-brake cables are being installed, disconnect the old e-brake cables from the frame mounting bracket (above the transfer case) and remove cables.
12. Remove the axle.

NOTE:

In some cases it may take a slide hammer axle remover to pull the axles.

13. Using a wire brush, scraper, etc, thoroughly clean and inspect the bearing retainer flange on the axle. Remove any irregularities such as welding slag, nicks, etc that would prevent the caliper bracket from mounting flush. See Figure 2.

WARNING:

This inspection is very important. If the caliper bracket does not mount flush, brake performance will be greatly affected.

14. Test fit the caliper bracket to the axle flange to assure that the bracket fit flush.

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15. If the existing axles will be reused, inspect the bearings and splines. Replace any defective bearings or axles.
16. If the old axles are going to be reused, carefully remove the old wheel studs.

NOTE:

It may take a press to remove the wheel studs.

17. Slide the new modified CJ7™ disk onto the axle. Align the large access notch with the access hole on the axle wheel flange. See figure 3.
18. Insert the new wheel studs through the back of the disk rotor and into the axle wheel flange. See Figure 3.

NOTE:

It may require a press to insert the wheel studs.

19. Slide the new axle spacer over the bearing and against the existing axle retainer.
20. Slide the axle onto the axle tube and test fit the caliper bracket on the inside axle flange. Check that the caliper bracket is parallel to the disk rotor and flush to the axle flange. See figure 4.

WARNING:

This is very important. If the caliper bracket does not mount flush and is not square (parallel) to the disk rotor, brake performance will be greatly affected.

NOTE:

A 1" wide steel rule is a good tool to check that the caliper bracket is parallel to the disk rotor. See Figure 4.

21. Install the three provided 3" allen cap screws through the caliper bracket, axle flange, spacer and bearing retainer and secure with the provided torque prevailing nuts. See Figure 5.
22. Install the provided 1" allen cap screws in the remaining hole and secure with provided torque prevailing nut. See Figure 5.
23. Torque the attaching hardware to specs.
24. Check that the caliper bracket is parallel to the disk rotor and flush to the axle flange. See figure 4.
25. Mount the calipers with the pads installed and secure it with the two caliper mounting bolts.

NOTE:

In some installations to avoid the outer disk pad from rattling during operation, it may be necessary to bend the tabs on the outer disk pad so they will grip the caliper body. Bend the tabs only enough so the pad will snap on and are held securely.

26. Remove the nut securing the e-brake lever to the brake caliper.
27. To adjust the e-brake, rotate the e-brake lever forward. Remove the lever from the caliper piston. Reposition the lever to the rear and reposition it on the e-brake piston shaft. Rotate the lever forward. Continue this process until the brake pads lightly

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contact the disk rotor. Reposition the e-brake lever to the “e-brake off” position (rearward, against the stop) and secure it with the nut.

28. Using the e-brake lever on the caliper, apply the brake while observing that the pads hit the rotor evenly at all points. Note any flex of the disk rotor or caliper. If the pads do not strike the pads evenly or there is any observed rotor/caliper flex, recheck the caliper bracket for out of square with the disk rotor and correct as necessary.
29. If the original e-brake cables are being reused, remove the spring from the end of the cable.
30. If new BC Broncos e-brake cables are being used, insert the cable casing through the e-brake bracket and secure it with the provided “e” clip. Insert the cable casing through the frame e-brake mounting bracket and secure with the provided “e” clip.

NOTE:

On the BC Broncos e-brake cables, the “ball” ends will be used on the e-brake bridle bracket (above the transfer case) and the “cylinder” end will be used on the caliper e-brake lever.

31. Insert the e-brake cable through the caliper e-brake bracket and the spring on the caliper. Hook the cable end over the e-brake lever.

NOTE:

Only if reusing the stock e-brake cables, the hole in the e-brake cable bracket may have to be enlarged slightly to accept the cable casing end.

32. Adjust the e-brake adjusting rod on the e-brake equalizer bar (located above the transfer case) by about 2 turns or as necessary. The e-brake cables are adjusted correctly when the caliper e-brake levers are just touching the stops.
33. If the old hard lines are in good condition they can be shortened and reflared to accept the new flex lines. If not, BC Broncos has hard lines precision bent to the proper lengths.
34. BC Broncos also has universal mounting tabs that will fit a large number of flex line end configurations. Hard line mounting tabs also can be custom fabricated and welded to the axle tube to support the end of the hard lines. Install the flex brake lines to the brake hard lines through the mounting tab.
35. Install the flex brake lines to the brake calipers using a banjo bolt and two copper washers as shown in Figure 6.
36. Thoroughly bleed the calipers.
37. Check for any fluid leaks. Correct as necessary.
38. If the stock shock location will be reused, place the shock spacer in the lower shock mounting bracket. Mount the shock eye to the inboard side of the lower shock mounting bracket. Insert a ½” x 4 1/2” bolt through the lower shock mounting eye and the mounting bracket/spacer. Secure with a ½” Nylock nut. See Figure 7.
39. Check for any interference with the caliper and shock. Correct as necessary.
40. Reinstall the wheels

41. Remove the jack stands.

42. Carefully and thoroughly test the function of the brakes.

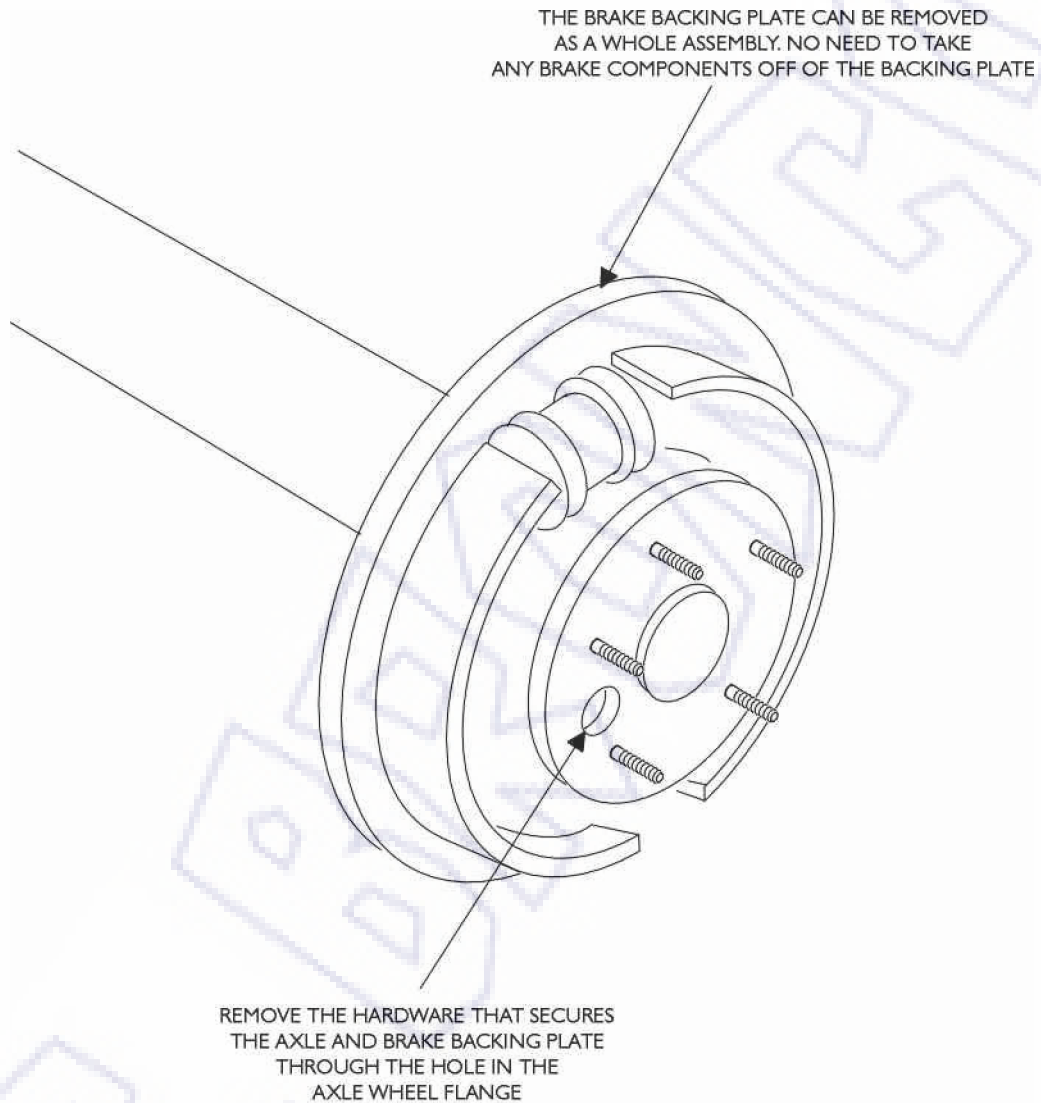


FIGURE 1

Figure 1. Remove drum brake backing plate.

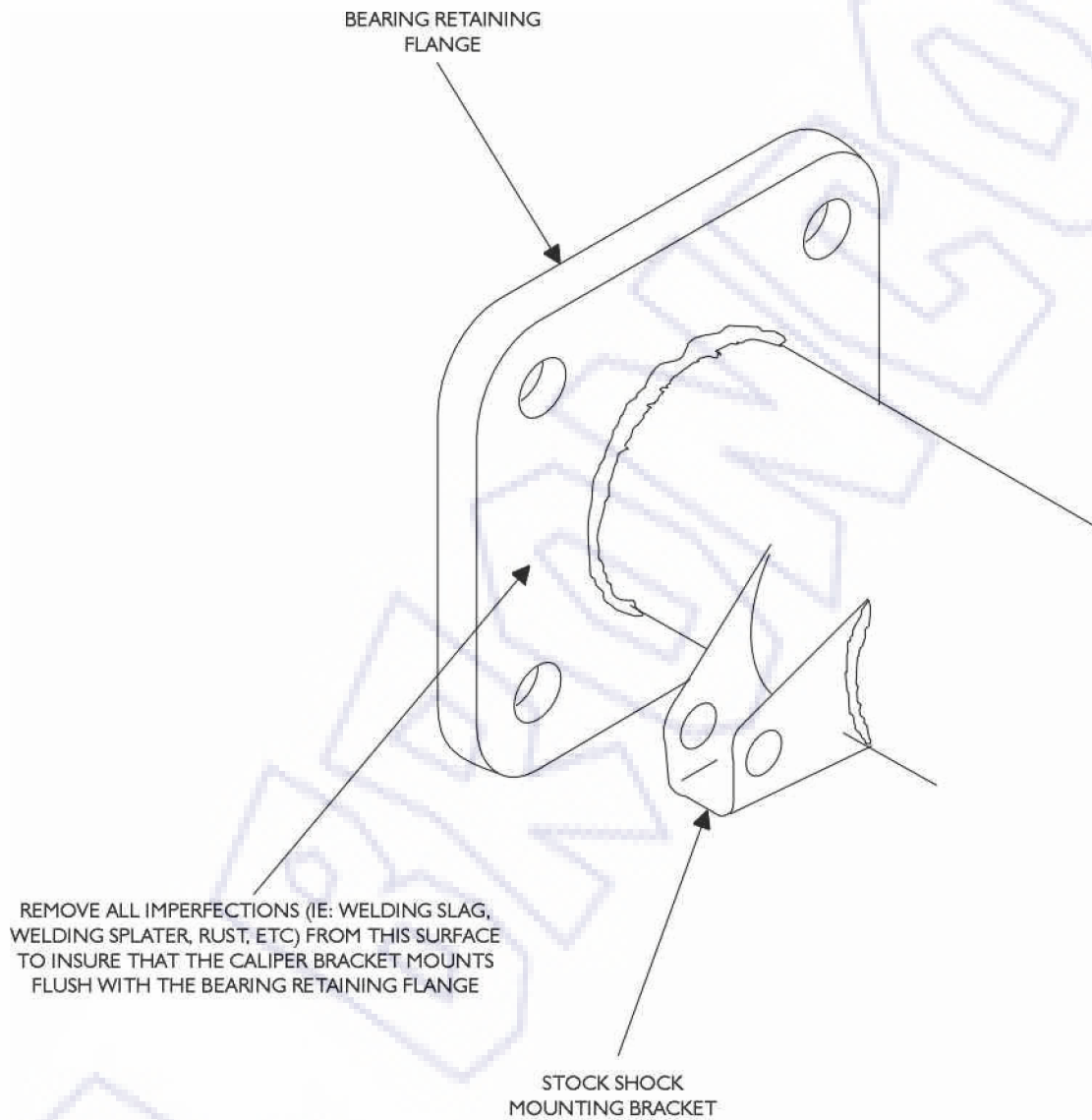


FIGURE 2

Figure 2. Make sure the bearing plate is free from rust, welding slag, etc.

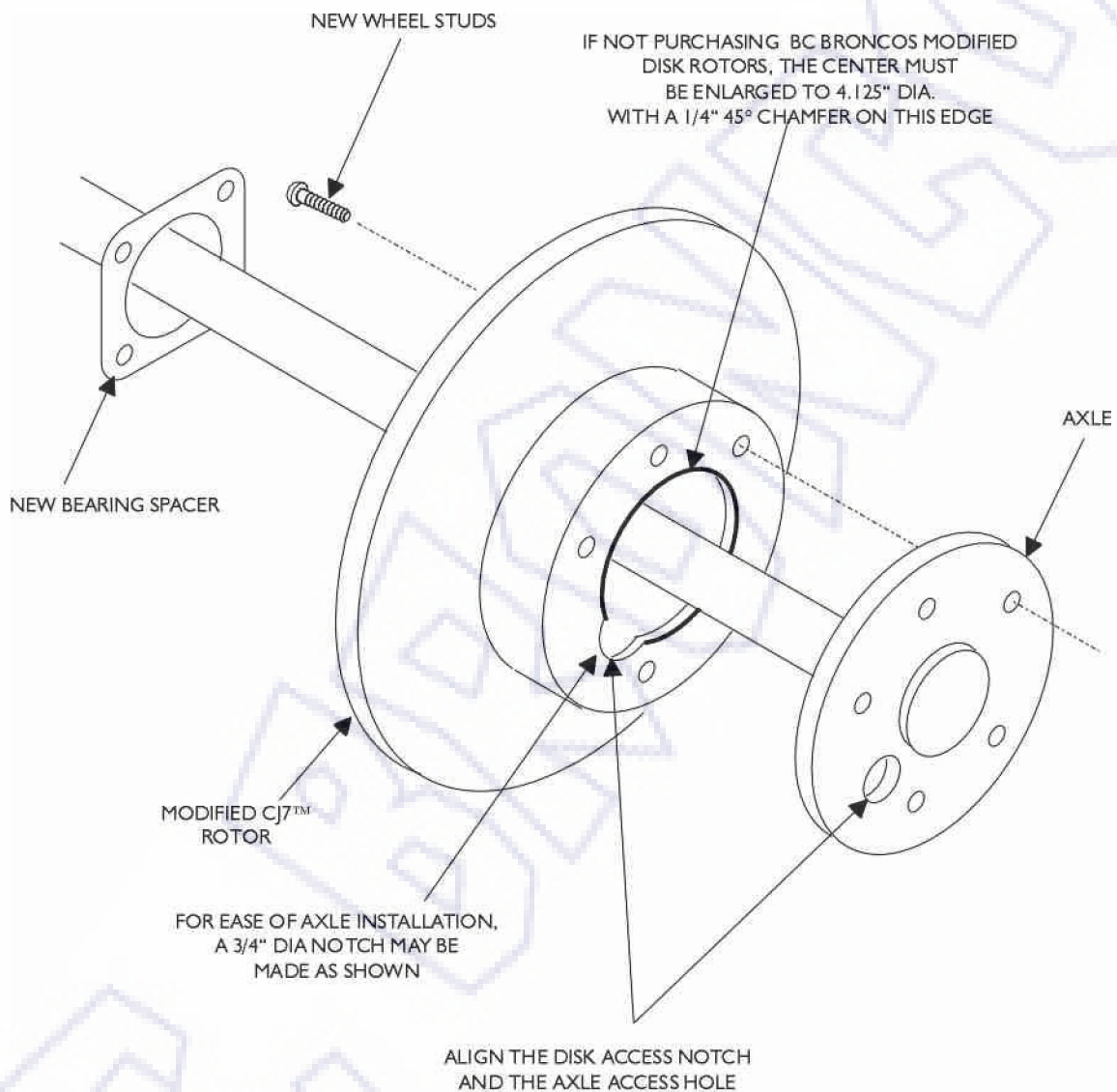


FIGURE 3

Figure 3. Install modified disk rotor behind the axle flange.

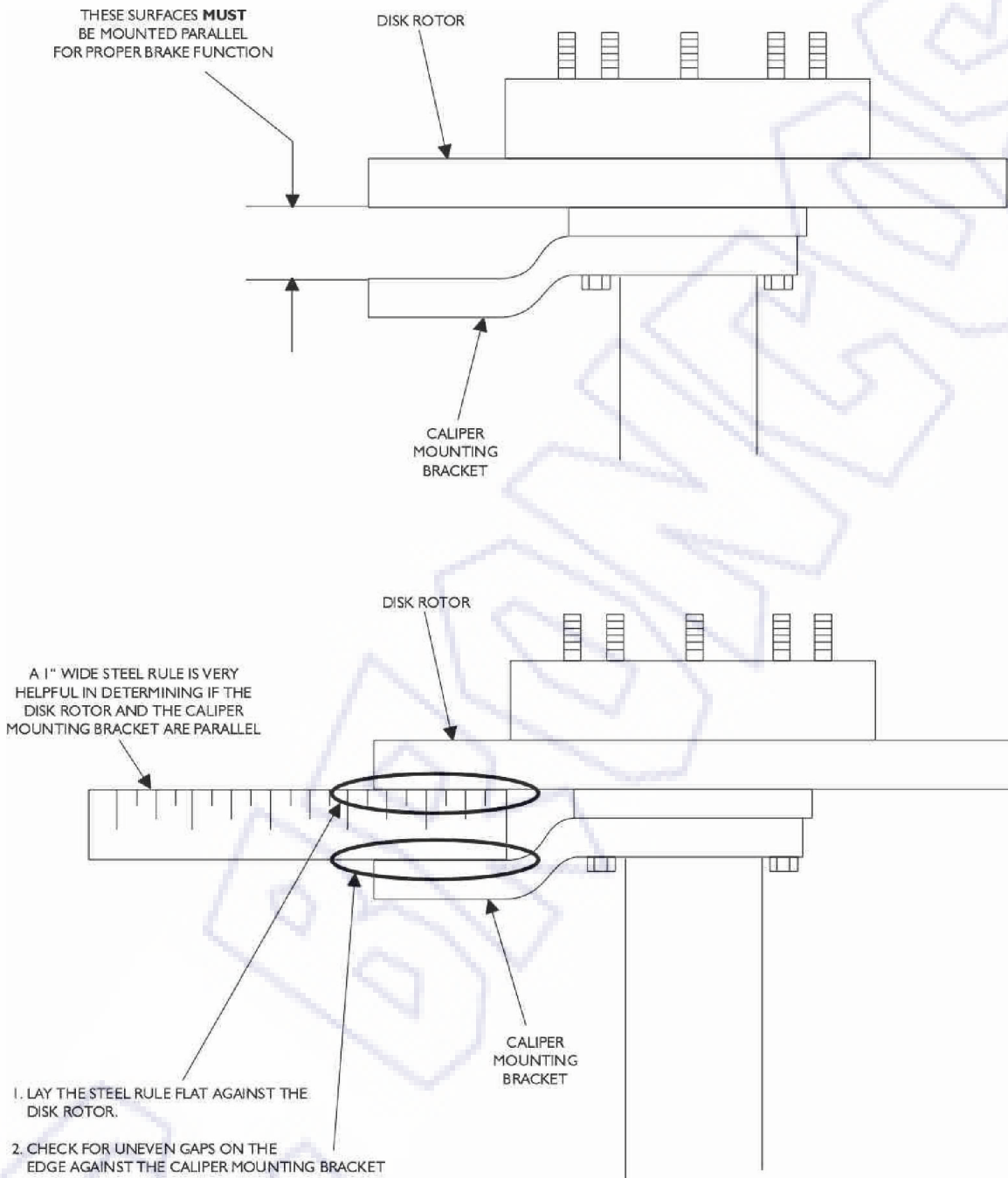


FIGURE 4

Figure 4. Caliper mounting bracket MUST be mounted parallel to the disk rotor.

FIGURE 5

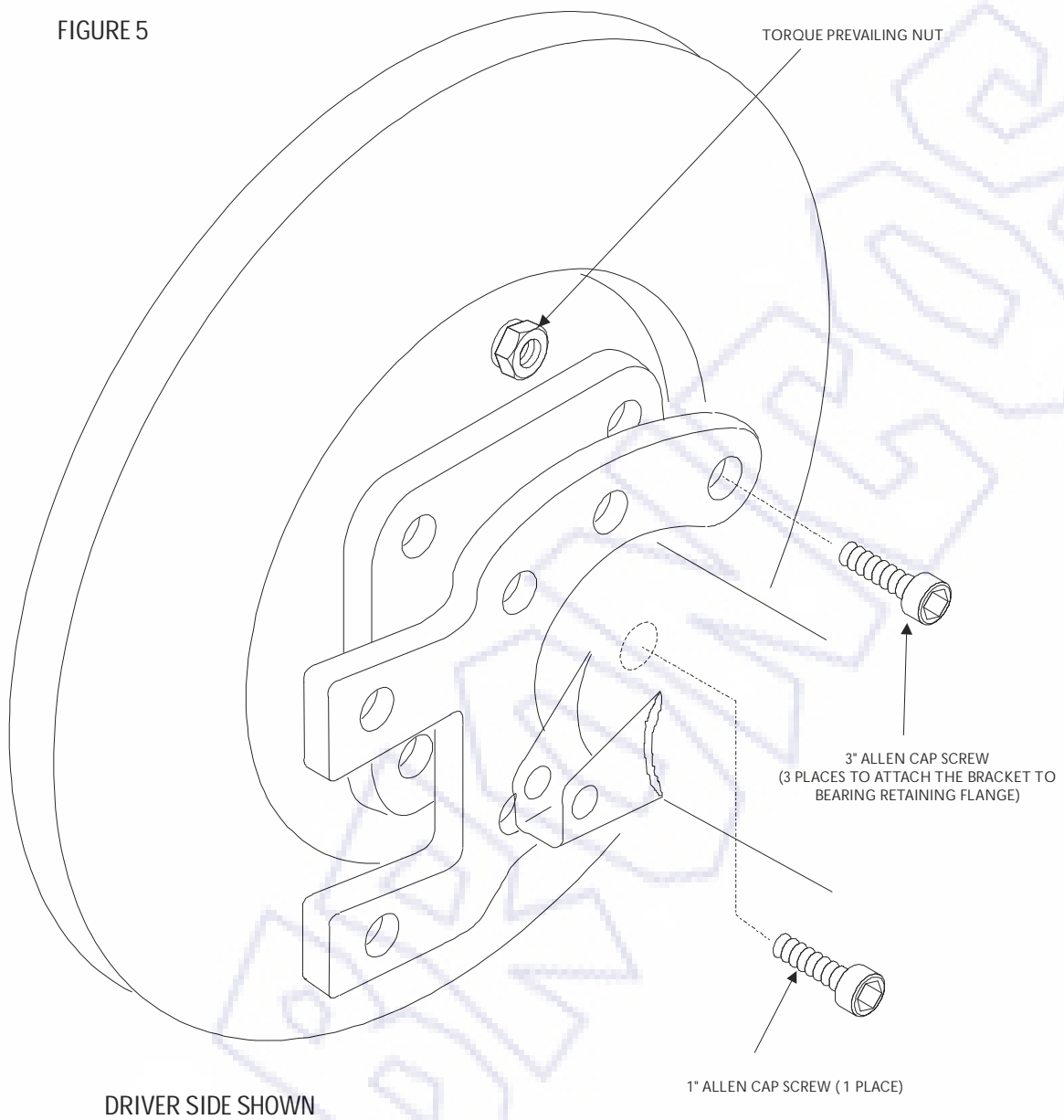


Figure 5. Mounting the caliper bracket to the bearing plate.

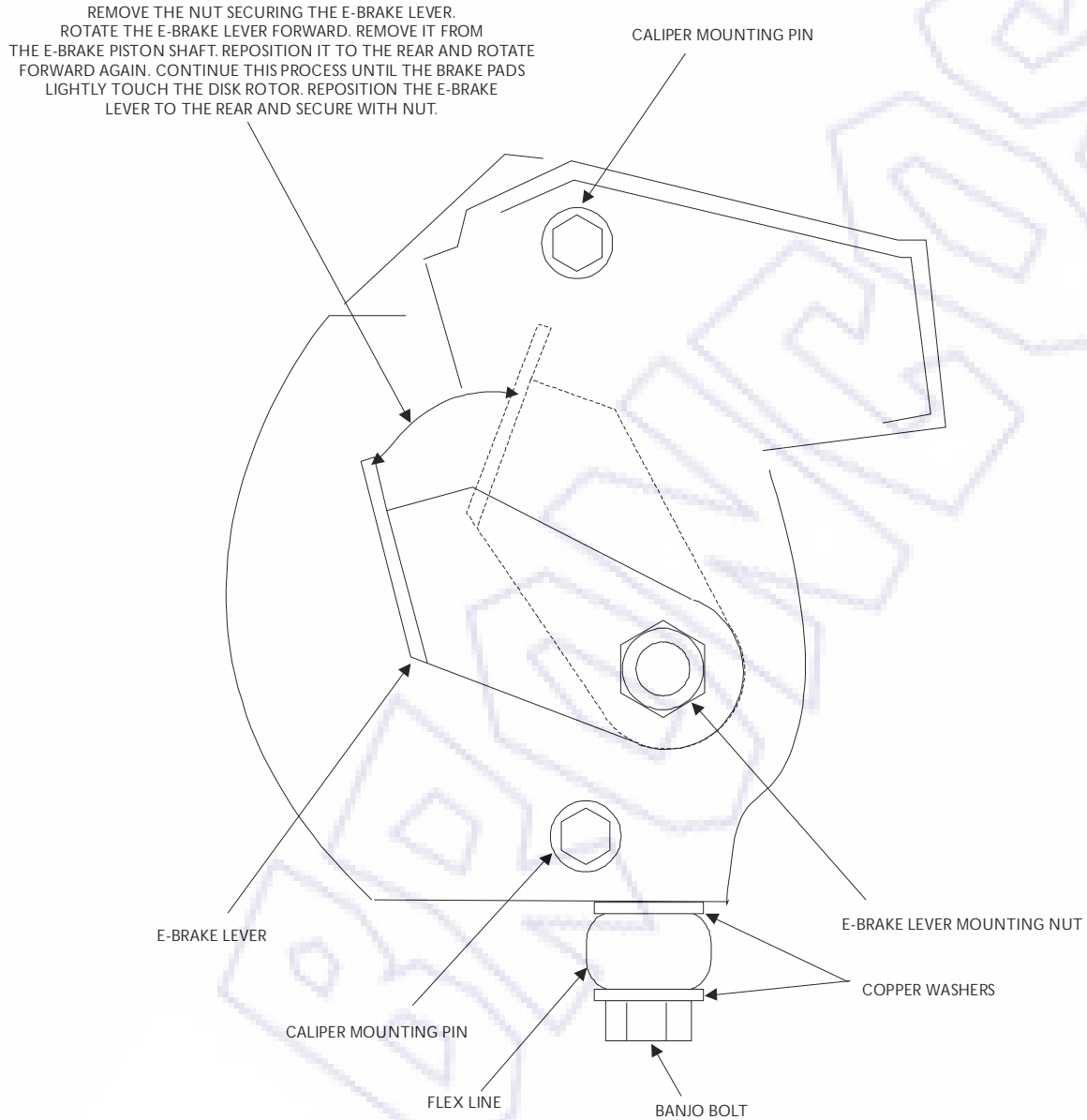


FIGURE 6

NOTE: THE DRIVERS SIDE REAR CALIPER IS SHOWN.
THE PASSENGERS CALIPER IS A MIRROR IMAGE.

Figure 6. Adjusting the parking brake.

FIGURE 7

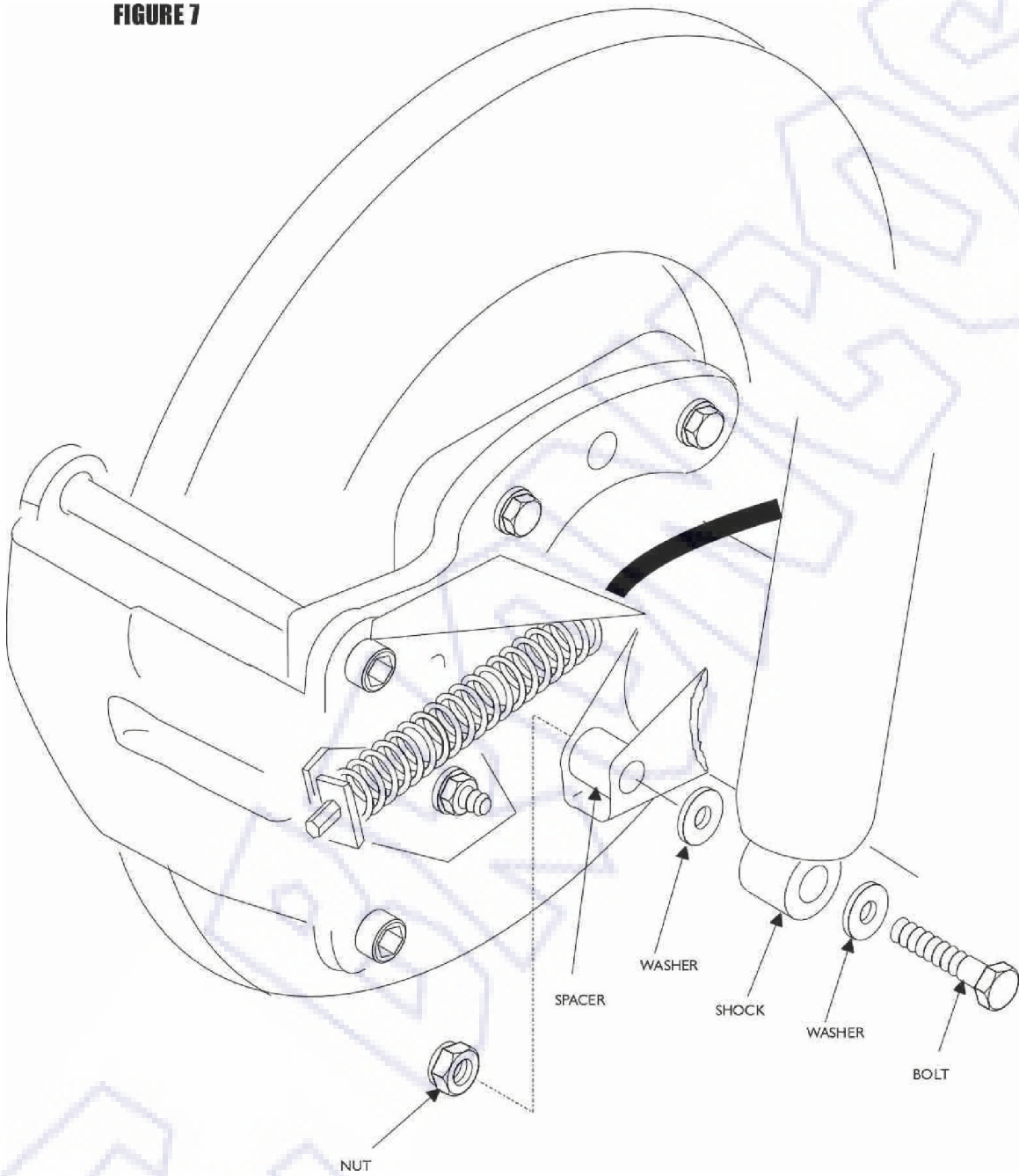


Figure 7. Shock lower mounting.