



## #7500/7600 Rear Disc Kit Installation Instructions

TOOLS NEEDED:	
Welder	Standard Wrench Set
3/8 Ratchet & Socket Set	3/8 Allen Wrench or 3/8 Allen Socket
Cut-off Tool	Deadblow Hammer
Jack Stands	

PARTS INCLUDED:	
2 - Rotors	2 - Caliper Mounting Brackets
2 - Round Spacer Plates	2 - Horseshoe Brackets
2 - Loaded Calipers (LH & RH) with Pads	2 - Brake Hoses w/Mounting Clips
2 - Banjo Bolts	2 - Caliper Hose Brackets
2 - Steel Brake Lines (LH & RH)	2 - Emergency Brake Cables (LH & RH)
2 - Shock Mounting Bolts & Spacer Sleeves	1 - Hardware Bolt Kit
1 - Two Hole Spacer Kit	

**NOTE: Must remove old bearing retainer plates prior to installation of new parts.  
When re-using stock axle studs, rotors must be drilled using a 39/64 bit for proper fitment.**

### INSTALLATION:

1. Jack up the rear end and support it with jack stands. Remove the rear tires.
  2. Remove the lower bolts in the shock mounts. Remove the shocks from mounts. This will allow for easier installation of the calipers.
- ⌘ Remove the rear drums and the four axle retaining nuts. Remove the axle shafts being careful not to rotate the axle while pulling. Some vehicles equipped with a track lock limited slip have dual splined side gears that can become misaligned making axle reinsertion difficult. Remove the brake backing plates and emergency brake cables.
- ⌘ Install the 1/8" thick round spacer plates with four new retainer bolts. These plates are the same thickness as the drum brake backing plates that were removed. If assembling with standard sealed bearings, big or small style, these are the only plates that will be used. If you are assembling axle shafts with Set 20 bearings, the thinner 1/16" thick round spacer plates will be applied also, before installing the axle shaft. The set 20 Bearing is slightly thicker than the standard sealed bearings when installed.

Applying the additional 1/16" thick spacer plate to each side on top of the 1/8" thick spacer plate will ensure the base plate (the new Caliper Retainer) does not distort when the bolts are tightened.

- ' ž Place the upper caliper bracket bolts in base caliper bracket, threaded end toward the inside.
- (ž Slide the axle shaft back into the housing just until the bearing starts into the housing bore.
- )ž Drop the base bracket into place (U-shaped cutout facing down) with the four bolts hanging in the bracket facing toward the center of the housing.
- \*ž Shove the axle shaft all the way into the housing and place the lock washers and nuts on the four retaining bolts holding the axle in.

**Bolt Torque: 50 ft-lb for 1/2" axle retaining bolts -- 30 ft-lb for 3/8" axle retaining bolts.**

9. Install two thick and one thin two-holed spacers on the upper & lower bolts on the caliper base plate. These spacers may need adjusting in step #13.
10. Install the upper mounting plate onto the base plate making sure the welded nut plates are facing in toward the center of the differential. Fasten the bracket using four 3/8" lock washers and nuts. Torque nuts to 30 ft-lb.
11. Install rotors. Make sure mating surfaces are clean from rust and dirt. If using stock studs, drill holes to 39/64". Install a couple lug nuts to hold the rotors in place.
12. Rotate the rotors and check for wobble or obstruction. If there is any wobble, check for interference in the mating areas. If not, then the axle and rotor bolted together should be faced to true up. Mark the position of the rotor and axle so that it can be installed the same way if the rotors are removed in the future.
13. Install the calipers so that the bleed screw is at the top facing forward. If it is on the bottom, use the other caliper. Make sure the projections on the caliper don't interfere with the bracket. Remove spacers as needed between base mount and caliper support bracket until caliper drops over rotor and fits properly against caliper mounting plate.
14. Install new steel brake lines from the stock center brake hose out toward the calipers.
15. Install braided stainless hose to caliper with a copper washer between the caliper and hose and between the hose and banjo bolt, and loosely connect to new steel housing lines. This will determine mounting locations for brake line support tab. They are made to be mounted on the rear of the axle tubes, approximately 2" in from the center of the inner u-bolt. Applications may vary slightly.
16. Weld brake line support tab to housing or attach tab to housing with a clamp. Route brake hose around back side of shock.

17. Tighten all brake hose connections.
18. Install cable through caliper spring to caliper e-brake lever. Snap the brake cable housing into the cable support.
19. Route cables up to center cable attaching point. Cables are made to go above the leaf springs. Secure as needed to protect from exhaust/driveline.
20. Mount cables in body support bracket with supplied clips. Attach to factory e-brake linkage and adjust. The rear caliper with integral parking brake is self adjusting when you use the parking brake. As the pads wear, it will click to the next stop. But they do not always work and they will not work if you do not use your parking brake. For caliper adjustment, see Addendum #1.  
**For proper performance you MUST adjust the calipers.**
21. Bleed air from system. Gravity bleed first: Fill master cylinder level, open rear bleed screws until clean fluid comes out. Keep master cylinder full. Close bleed screws.
22. Bleed entire system. Use RR, LR, RF, LF sequence. Bleed until you have clean, clear fluid with no air bubbles. Install wheels and torque.
23. Test braking system in an empty parking lot or driveway. Make several stops of varying levels - light braking, medium braking, hard braking (panic stop). Note operation of brakes: pedal feel, wheel lock up and stopping power.

## TROUBLESHOOTING

1. Gravity bleeding. Calipers, especially rear calipers with all the parts and crevices, can trap air inside them. Gravity bleeding is the best method we have found to bleed calipers. To gravity bleed, remove the caliper from the bracket and leave the rubber hose attached. Take the top off the master cylinder and keep filled. Hold the caliper so the flex hose is going slightly uphill to the caliper. Open the bleed screw so fluid and air will slowly come out of the bleeder. You can move the caliper around, tap it lightly with a rubber hammer to help knock the air bubbles loose. When the fluid runs clean and clear, close the bleeder. Do the other side. Do both calipers again. (Do not push the pedal until you reinstall the calipers on the rotors.) REMEMBER that air bubbles rise. The bleed screw must be at the top where it breaks into the caliper cylinder to get the air out. The bleeder will be pointing toward the front.
2. Adjust Caliper Parking Brakes. The rear caliper with integral parking brake is self adjusting when you use the parking brake. As the pads wear, it will click to the next stop. But this method does not always work and they will not work if you do not use your parking brake. To adjust the parking brake the fast way, remove the arm, turn the shaft as far as possible and reinstall the arm.
3. Remove Residual Valve(s). The residual valve holds 10 pounds of pressure on a drum brake system when the brakes release to keep the springs on the shoes from collapsing the wheel cylinders. Residual valves can be found in the end of the cylinder on single master cylinder (66 only) where

the brake screws in. On a dual master cylinder system, they can be found in both ports with drum brakes. One in the rear line only on front disc/rear drum systems, or in the combination valve rear line only. You can remove the residual valve from the master cylinder where the brake line screws in using a sheet metal screw. Screw it in and pull. It should come right out.

**For technical assistance, please call our tech line at 541-779-1339.**