

8K Disc Brake Mounting Instructions



Disc Brake Installation Instructions

With axle beam prepared for disc brake installation (all brake and/or wheel equipment removed from brake flange and spindle):

1. Install caliper-mounting bracket onto brake flange. Install bracket such that the caliper will be mounted at the 3:00 o'clock position on the road side of the trailer and at the 9:00 o'clock position on the curb side of the trailer. Verify that the bracket fits up on the flange-pilot and sits flush against the flange face. Install 1/2" mounting bolts, lock-washers and nuts. Torque nuts in a cross pattern to 70-80 lb.-ft.
2. Install idler hub onto axle spindle. Refer to the *Bearing Adjustment and Hub Replacement* section in the Dexter Axle maintenance manual for instruction. Once installed, inspect idler hub face. Remove any burrs, debris, paint runs, etc from the hub face area of the idler hub that could prevent 100% contact between the rotor and hub face.
3. Install Rotor onto idler hub. Check that the rotor properly seats against the hub face by trying to rock the rotor back and forth. If rotor mounts to hub face properly there should not be any rocking noticed. If there is, then remove the rotor from the hub face and repeat step #2.
4. Install three lug nuts (upside down so cone on nut is away from rotor face) to temporarily secure the rotor to the idler hub. Torque lug nuts to 10-20 lb.-ft.
5. Assemble the inboard and outboard caliper halves to caliper mounting bracket using four 3/8" hex head bolts (grade 5) and lock-nuts. Torque lock-nuts to 25-50 lb.-ft.
6. Install crossover brake line to lower set of ports in caliper. Torque tube nuts to 12-15 lb.-ft.
7. Install bleed screw in top port of outboard caliper. Torque bleeder screw to 60-75 lb.-in.
8. If the trailer is plumbed using inverted flare lines and hoses, install adapter fitting in top port of inboard caliper. Torque adapter to 60-75 lb.-in. If trailer is plumbed using ISO bubble flare lines and hoses, omit adapter.
9. Install inboard and outboard brake pad. Slide pads into calipers and install 1/4" pad keeper bolt. Torque lock-nut to 15-25 lb.-ft.



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Brake Line Hook-up and System Bleeding

1. Install brake lines from hydraulic actuator to disc brake caliper. Use 3/16" or 1/4" steel tubing for all hard-line connections between actuator and take-off to axle. All tubing must have double flare connection at joints. Anchor hydraulic tubing securely to frame and axle. Use DOT high-pressure hose for flex connections such as frame to axle or frame to brake caliper.
2. Follow the actuator manufacturer's recommendations to pressurize the brake lines (a vacuum brake bleeding system may also be used). Brake bleeding should be conducted with tire and wheel assembly removed from hub.
3. The caliper must be installed with the bleeder screw pointing up otherwise the entrapped air will cause the system to not function properly. (On Torflex axles the trailer may need to be loaded with weight or the rear of the trailer elevated with respect to the front of the trailer in order to make the bleeder screw point straight up).
4. Start the bleeding procedure on the disc brake caliper that is the farthest away from the actuator. Insure the bleeder screw is tight before beginning procedure. Use a small bleeder hose that will fit over the top of the bleeder screw. Submerge the other end into a clear container of brake fluid to observe any bubbling.
5. Pressurize the hydraulic fluid system. Open the bleeder approximately 1/2 turn and only for a few seconds. Trapped air and pressurized brake fluid will be vented into the clear container. Close, or tighten, the bleeder screw. Release the pressure in the actuation system. Continue this procedure at each caliper until a clear steady flow of brake fluid comes out of the bleeder into the clear container. The bleeding operation is complete when all the entrapped air is removed from the actuation system. Be sure not to get any brake fluid on rotor or lining surface.
6. Periodically check the fluid level in the master cylinder reservoir so no additional air is introduced into the system during bleeding. After bleeding is completed, make sure the master cylinder reservoir is filled to the proper level and all bleeder screws are tight. Torque range for bleeder screw is 60-75 lb.-in.

Disc Brake Information

Maximum system operating pressure: 1,600 psi
Fluid displacement required per axle: 0.90 in³
Hydraulic line fitting size to install into caliper adapter: 3/8"-24 UNF thread, 3/16" or 1/4" tubing
Minimum rotor thickness: 1.03" inches

Bleeder screw torque: 60-75 lb-in
Adapter fitting torque: 60-75 lb-in
1/2" Caliper mounting bracket to axle flange nut torque: 70-80 lb-ft
3/8" Caliper mounting lock-nut torque: 25-50 lb-ft
Cross-over brake line tube nut torque: 12-15 lb-ft
1/4" Pad retainer lock-nut torque: 15-25 lb-ft