



DISC BRAKES

PREMIUM PERFORMANCE BRAKES

INSTALLATION INSTRUCTIONS

Hat Style Disc Brake

CAUTION

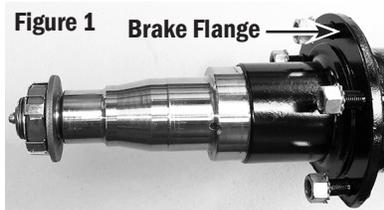
- Failure to properly secure or support the trailer weight while servicing could result in serious injury or death. Make certain all lifting and supporting equipment has sufficient capacity, is used properly, and the trailer is securely supported on jack stands.
- A “disc brake ready” actuator must be used with these brakes. Actuators designed for drum brakes will cause disc brakes to work improperly, quickly overheat, and fail, resulting in property damage, serious injury, or death.
- Ensure the brake hydraulic system is properly bled and functioning properly in order to assure adequate braking performance for safe trailer operation.
- Ensure the caliper mounting fasteners and spindle nut are tightened to the specifications below to avoid a caliper locking a wheel, losing braking function, and/or loss of a wheel resulting in a loss of control, property damage, injury or death.

1. Jack up trailer and secure on adequate capacity jack stands. Follow trailer manufacturer’s recommendations for lifting and supporting the unit. Use the jack only to lift the trailer, never for support when servicing. Always fully support the trailer with jack stands, all around; and block the trailer to keep it from rolling, moving, or falling off the stands when being serviced.

CAUTION

Do not lift or support the trailer on any part of the axle or suspension system. Never go under any trailer unless it is properly supported on jack stands which have been rated for the load. Improperly supported vehicles can fall unexpectedly and cause serious injury or death.

2. Remove the tire and wheel assembly.
3. Carefully inspect the original axle brake flange for straightness, weld spatter and imperfections that will affect proper mounting of the brake caliper or adapter plate later. Address as necessary (Fig. 1).

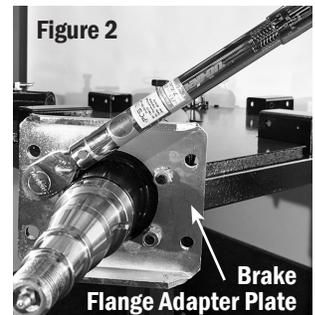


For 3,500 lbs. disc brake kits, proceed to step 5. For 5,200 lbs. and 6,000 lbs. disc brake kits, proceed to step 4.

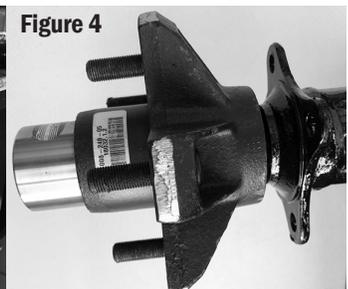
4. 5,200 lbs. and 6,000 lbs. disc brakes kits will come with a brake flange adapter plate (Fig. 2). Install the brake flange adapter

plate onto the existing axle brake flange, with bent legs of the bracket facing out towards the axle wheel end. The adapter plate mounts with five 3/8”-24 UNF bolts, nuts, and lock washers. Install medium grade (blue) Loctite® 242 or equivalent on the threads and torque the bolts/nuts evenly in a star pattern to 35 ft. lbs..

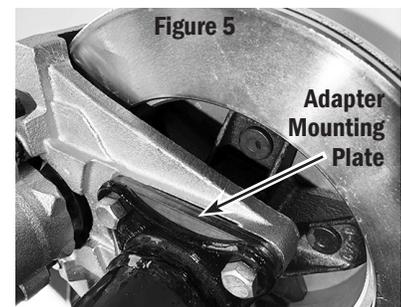
Note: Some of the brake flange adapter plates can be installed with the (non-brake) hub still on the spindle. If the hub must be removed to install the adapter plate, reinstall it with a new wheel bearing seal, and with bearings lubricated and adjusted per the axle manufacturer’s instructions.



5. Slide the hat rotor over the existing idler hub studs. Note: Use two lug nuts to secure the rotor against the hubface when assembling the calipers. After the caliper is installed, remove the lug nuts. Check the length of the other studs protruding through the rotor hubface and be sure they are proper lengths to work with the existing trailer wheel and lug nuts (Fig. 3 & 4).

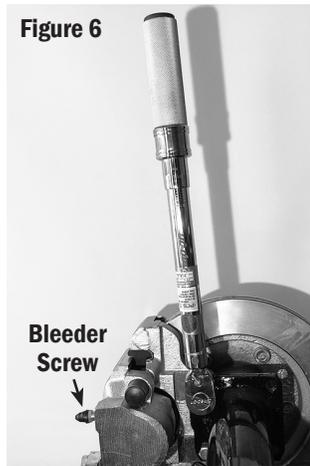


6. Inspect the caliper ensuring that the brake pads are properly installed. The brake pad friction material faces towards the rotor and seats into anchor points and against the caliper piston. Slide the caliper over the rotor and attach the caliper to the brake flange or brake flange adapter plate. The caliper bleeder screw should be oriented to the top, and caliper fluid inlet to the bottom. Typically the caliper will be mounted with the caliper body/piston/brake lines towards the rear of the axle.



NOTE: If the original axle is a Dexter idler axle with a five lug hub, it has a special hubface spacing, and so an L-shaped 3-hole spacer is in the kit that will install between the new caliper and original axle brake flange. The adapter is the unpainted part shown in Figure 5.

7. Make sure the caliper bleeder screw (Fig. 6) is facing upward when bolting on the caliper. Start the two (5,200 lbs. – 6,000 lbs. kits) or three (3,500 lbs. – 3,700 lbs. kits) 7/16"-20 UNF caliper bolts through the brake flange or adapter plate into the caliper yoke with medium (blue) Loctite 242 or equivalent. Install and torque the bolts to 55 ft. lbs. Ensure the rotor will rotate inside the installed caliper with sufficient clearance and no more than a slight contact with the brake pads, or adjust caliper/pad clearances as required to allow rotor rotation.



8. Use a brake hose with a male 3/16" inverted flare fitting to connect to the caliper with enough flexibility to allow the caliper to move at least a 1/2" as the brake pads wear. Tighten the brake line fitting into the brass banjo inlet on the caliper just snug enough not to leak. Reference torque: Only 6 to 7 ft. lbs. or finger tight + 1/2 turn on the brake line. The 5/8" head "banjo" bolt fitting is torqued to 30-35 ft. lbs.; no tighter or this hollow bolt may strip. Connect and secure all brake lines appropriately for the trailer's intended use. Ensure that the caliper and brake inlet line have sufficient clearance to the trailer frame and suspension to avoid contact under any loading scenario. Fill the brake system with new DOT 3 fluid (or if these are replacement brakes, a different fluid may have been specified by the trailer manufacturer in very rare cases; confirm compatible fluid for those) and bleed per the brake actuator manufacturer's instructions. Use a clear bottle with hose at the caliper bleed ports so one can absolutely verify all air bubbles are removed from the system when bleeding.

9. Install the trailer wheel and ensure the wheel inside has clearance to the brake caliper body as it rotates. Tighten all lug nuts in a star pattern with an accurate torque wrench to the torque specified by the trailer manufacturer (Fig. 7).



⚠ CAUTION
Before road testing, make sure the area is clear of vehicular and pedestrian traffic. Failure to brake safely could result in an accident and personal injury to yourself and/or others.

Additional resources are available at www.dexteraxle.com.

⚠ CAUTION
When finished with the installation, torque the wheel nuts to the trailer manufacturer's specifications. Re-torque nuts again at 10, 25, and 50 miles to avoid a possible wheel separation, which can result in property damage, serious injury, or death.

10. Re-torque the lug nuts again at 10, 25, and 50 miles to avoid a possible wheel separation.
11. Road test the trailer in a safe location. After the first few stops, check the brake fluid in the actuator reservoir and top off again to the proper level. Note: brake performance may not be optimum until the brake pads adjust and seat themselves to the rotor. If braking performance still needs improvement, repeat the brake bleeding procedure to resolve.