Vented Disc Brake

When backing a trailer with disc brakes, you must have a lockout lever or preferably an electrically operated solenoid to stop brake pressure to the disc brakes. The solenoid is mounted at the rear of the actuator, between the master cylinder and brake line. It has a wire connected to your back up lights to stop or redirect the fluid to keep the brakes from operating.

Replace Brake Pads

1. Elevate the trailer using the manufacturer’s instructions. Always use jack stands for support. Do not depend on a jack to support the trailer. Block wheels to keep trailer from rolling.

2. Remove the tire/wheel assembly. Inspect the rotor surface. Check for excessive wear or grooves that may affect braking. Original hat style rotor thickness is .939” with a minimum thickness of .85” or 21.6 mm. Original integral rotor thickness is .75” with a minimum thickness of .67” or 17 mm.

3. Inspect brake pads. Minimum thickness is 3/32”. Pads should be replaced if below this width.

4. Remove the caliper by unscrewing the slider pins from the mounting bracket. Be careful to hold the caliper in place so that it does not fall and pull on the brake hose. The inside pad is spring loaded in the caliper piston. Pry this pad out gently with a flat blade screwdriver. The outside pad is held in place with two metal tabs. Use a large pair of pliers to straighten the tabs to remove the outside pad.

5. Clean the rotor with a brake cleaning spray. Replace brake pads in reverse order. The tabs should only be bent enough to hold the pad in place. Do not bend tab too far or the pad will not seat correctly. Outside pad should be able to wiggle after tab is bent.

6. Clean threads on slider bolts and mounting plate. Apply a coating of LIQUID LOCTITE® 263 or equivalent to the internal threads of the mounting bracket only. Insert slider pins through backside of caliper into mounting bracket. Use a 7/16” hex socket and tighten both pins to 40 ft. lbs.

DO NOT REASSEMBLE WITHOUT APPLYING LIQUID LOCTITE® TO THE BACKING PLATE. SLIDER PINS COULD BACK OUT AND CAUSE PERMANENT DAMAGE TO YOUR BRAKES AND TRAILER.

Removing Hub/Rotor

1. If your axle has an integral style rotor, then the hub and rotor are one piece, and will come off as one.

2. If you have a hat style rotor, the rotor will be removed after the wheel and caliper are removed. The hub will come off separate.

3. Elevate the trailer using the manufacturer’s instructions. Always use jack stands for support. Do not depend on a jack to support the trailer. Block wheels to keep trailer from rolling.

4. Remove the tire/wheel assembly.

5. Remove the caliper by unscrewing the slider pins from the
mounting bracket. Be careful to hold the caliper in place so that it does not fall and pull on the brake hose. Support the caliper so that it does not “hang” from the brake line.

6. Remove the grease hat from the hub by prying around the edge of the cap.

7. Bend the locking tang washer to the “free” position. If spindle is equipped with a cotter key, straighten cotter key to remove.

8. Remove the spindle nut in a counter clockwise direction and remove the spindle washer.

9. Remove the hub from the spindle. Be careful not to allow bearings to fall out of the hub.

10. Clean bearing and cup surfaces, repack with lithium marine grade grease.

11. Place hub on spindle in reverse order as listed above. Rotate the hub while tightening the spindle nut to approximately 50 ft. lbs. This translates into full hand pressure with a 12” long set of pliers or 12” long wrench.

12. Loosen the spindle nut to remove the torque, do not rotate hub.

13. Finger tighten the spindle nut until snug, backing out only to line up the locking tang washer. Bend the locking tang tab in place, Replace rotor.

14. Clean threads on slider bolts and mounting plate. Apply a coating of LIQUID LOCTITE® 263 or equivalent to the internal threads of the mounting bracket only. Tighten bolts to 40 ft. lbs.

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15. Replace cap. Install tire/wheel assembly and tighten wheel nuts to trailer manufacturer specifications. Test wheel for excessive tightness or excessive play. Readjust if necessary. Road test vehicle in a safe place before traveling on main roads in traffic.

**Installation/Replacement Instructions for Vented Disc Brakes**

1. On a bare axle attach mounting plate to brake flanges with the bleeder in the upright position. Exact positioning will be determined by the brake flange. Use 7/16” x 1-1/4” zinc hex bolts, lock nuts/washers and torque to 40 ft. lbs. Note: brake mounting plates can have 2 or 4 holes for attaching to the axle.

2. If installation is on a completed trailer, remove tire/wheel. This would be a good time to repack wheel bearings and inspect the bearings and seals if it has not been done recently.

3. Install hub (use existing instruction on installing hubs).

4. Place hat style rotor over hub. Make sure the hub face is clean with a smooth surface or: If installing an integral or “one piece hub rotor”, install rear bearing and seal. Grease bearings, then install front bearings.

5. Place caliper over rotor and mounting plate. A bleeder valve must be in the up position (see below). Check both calipers for this position. Some calipers have two valves others have only one.

6. Apply a coating of LIQUID LOCTITE® 263 or equivalent to threads on the mounting plate. Insert slider pins through backside of caliper into mounting plate. Use a 7/16” hex socket and tighten both pins to 40 ft. lbs. Check for binding, make sure rotor spins freely. NOTE: If the pins are removed after step 6, the pins/mounting bracket threads must be cleaned. Apply LOCTITE® 263 to the internal threads of the mounting bracket only. Be careful not to get LOCTITE® on slider pins or bushings.

7. Connect brakes lines and bleed brakes before using.

**IMPORTANT: WHEN BLEEDING CALIPERS, ALWAYS USE THE TOP MOST BLEEDER VALVE TO ALLOW AIR TO ESCAPE FROM THE CALIPER PISTON**

Always bleed through the upper most bleeder valve.