

# Performance Engineering & Manufacturing, LLC

For Technical Support Call 636-234-0975

## IMPORTANT INSTRUCTIONS FOR THE INSTALLATION OF Non-Emergency and Emergency Brakes

**B-On DBK-** with Non-Emergency Brake Calipers

**B-On DBK w/ E-** with Emergency Brake Calipers

### PARTS LIST:

1 piece of each Right and Left Brake

4 pieces 1/8 Spacer

8 pieces 5/16 Spacer

2 pieces Bracket Side Plate-2

2 pieces Bracket Side Plate-3

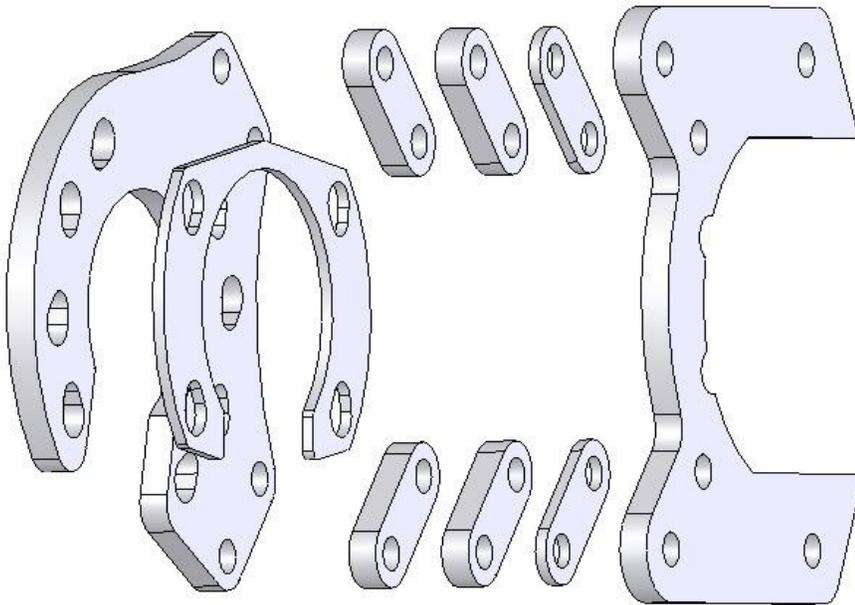
2 pieces Backing Plate Eliminator

8 pieces 3/8-16x2 Grade 8 Bolts

8 pieces Lock Nut

8 pieces Washer

2 Rotors



### INSTALLATION INSTRUCTIONS

1. Remove the axles and the drum brake backing plates.
2. While removed from the vehicle, remove stock axle retaining plates from axles. (bracket from kit retains axles)
3. Re install axles, install backing plate eliminator. Then retain axle with bracket side plate # 2, t-bolts and nuts. Ensure the four 3/8" holes are toward the rear of the vehicle.
4. Attach bracket side plate #3 using the 3/8" bolts, washers, and lock nuts. Use the 5/6" and 1/8" spacers to get your required brake offset. Bolt head must be on the wheel side. Use all 3 spacers for a 2 3/8" offset. Use only the two 5/6" spacers for a 2 1/2" offset.
5. Mount rotor on to axle and retain with two lug nuts.
6. Slide caliper and pads over rotor and attach caliper to bracket with caliper bolts. Ensure the bleed screw is on top of the caliper.
7. Attach flexible brake lines and bleed system before use.

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### ADJUSTING AND BLEEDING EMERGENCY BRAKE CALIPERS

1. When you install the calipers, put them in a good position relative to the cables and hose connections. Do not worry about the calipers in the right position to bleed the brakes. The calipers have to be taken off the brackets to be bled and once they are bled it still does not matter what position they are in.
2. Once everything is installed but before you put on the wheels, bleed the calipers. Air rises, so the bleed screw must be at the top. Start by using the normal bleeding methods; however, the brakes will not work properly if you do not take the calipers off of the brackets to let them bleed. Let gravity do its work to get the last of the air out.
3. Remove the master cylinder cover, take the caliper off of the bracket and hold behind the axle to gravity bleed the caliper. Hold the caliper so the bleed screw points forward, horizontal with the ground on the small 5 ½" pin to pin calipers and straight up on the large 7" pin to pin calipers. The mounting holes in the ears are around 45 degrees on a non-parking brake caliper and straight up (one hole above the other) on a parking brake caliper. Open the bleed screw and the fluid will start to dribble out. Slowly move the calipers just in case you are not in the correct position and tap on the calipers with a rubber hammer to knock the bubbles loose. Once the fluid is clear with no air bubbles, close the bleeder and hang that caliper on a wire and then do the other side. DO NOT step on the hydraulic pedal yet. Go to Step 5 for non-parking brake calipers.
4. Adjust the parking brake levers by pushing them forward. Each time you push them they should move off of the stop 3/8" to 1/2". When released, they should always return to the stop. If they will not adjust, try putting a lever between the rotor and the pad and putting pressure on the piston. Now push the lever, releasing pressure on the pad as the caliper adjusts. If the calipers won't adjust, you will have a low pedal because the piston will retract too far and will use up all of your hydraulic pedal travel to put the brakes on. Once the parking brake calipers are adjusted put a c-clamp on between the lever and the bracket to hold the parking brakes locked up.
5. Step on the hydraulic pedal. It should be high and hard. If it is low and spongy or if it pumps up, you still have air. Take the calipers off the brackets and bleed some more. If you have parking brake calipers and they are locked up against the rotors and there is no air in the rear system, then there will be no fluid movement in the rear brake system and the pedal should be as high as before you changed the brakes and had the parking brake on. It does not matter what size master cylinder you have. If there is no fluid movement you will have a high and hard hydraulic pedal. There might be a problem with your front system since you have a dual braking system. But if you have not changed the front, your pedal should be high and hard. It is not as easy to check if you are using non-parking brake calipers. The calipers run close to the rotors so check to see that the pads will not rattle. If your pedal is low and spongy, you have air. Remove the calipers and bleed them some more.