

# INSTRUCTIONS

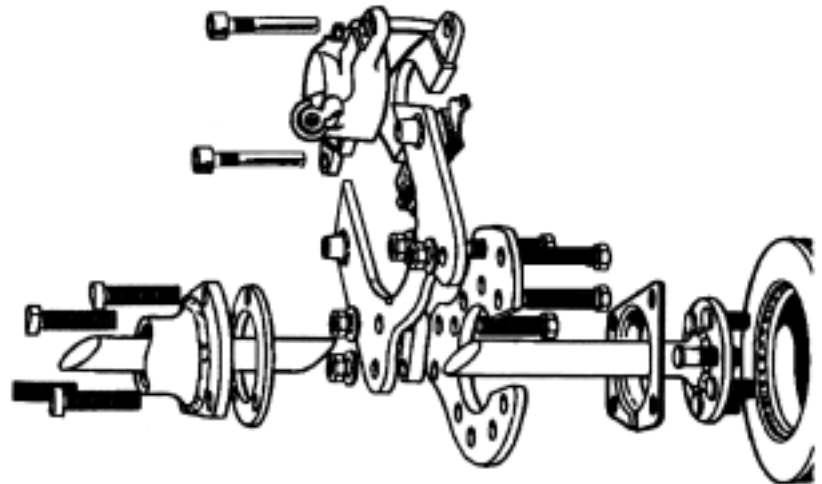
**910-31902 Non-Emergency Brake**  
**910-31921 Emergency Brake**

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## **CAR REAR DISC BRAKE CONVERSION (PRESSED BEARING STYLE)**

### **PARTS LIST**

- (2) New rotors
- (2) 2 piece brackets
- (8) 5/16 spacers
- (4) 1/8 spacers
- (2) Spacer plates
- (8) 3/8-24 x 1 1/2 Grade 8 bolts
- (8) 3/8-24 x 2 Grade 8 bolts
- (16) 3/8 flat washers
- (16) 3/8 grade 8 nuts



### **REPLACEMENT AND ADDITIONAL PARTS**

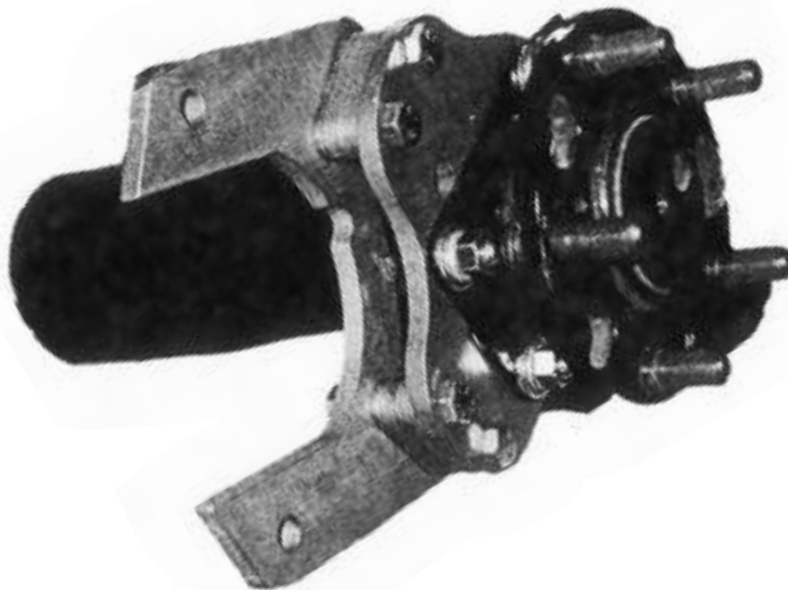
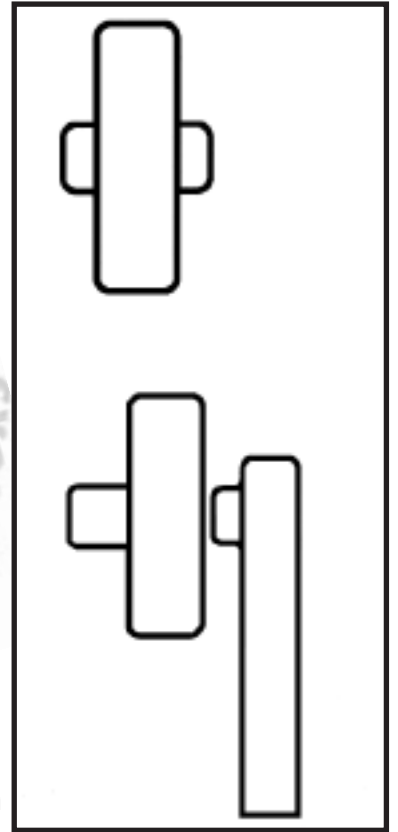
- (2) 1978-83 Chevelle, Monte Carlo, El Camino, Malibu, Tempest, Cutlass, F-85, Pontiac Grand Prix, Le Mans, GTO, Grand Am, Bonneville front calipers (no parking brake) with pads and mounting screws.
- (2) 1979-85 El Dorado, Riviera, Toronado, 1980-85 Seville with emergency brakes on the calipers. Rear calipers with parking brakes, pads and mounting screws.

### **INSTALLATION INSTRUCTIONS**

- (1) Remove the axles to take the backing plates off. Install the studs while the axles are out.
- (2) Install the axles with the spacer plates.
- (3) Install the base brackets with the caliper up and towards the rear. If the stock retainer will not slide far enough to get our bracket in, remove the stock retainer. Our bracket holds the bearing in. Use the spacer plate to take the place of the backing plate. Use the T-bolts, flat washers, lock washers, and nuts. The bracket can go in a 45° or 90° position and if you flip the bracket over slightly different positions are available. The rear parking brake calipers have their bleed screw in the 90° position and the front calipers have the

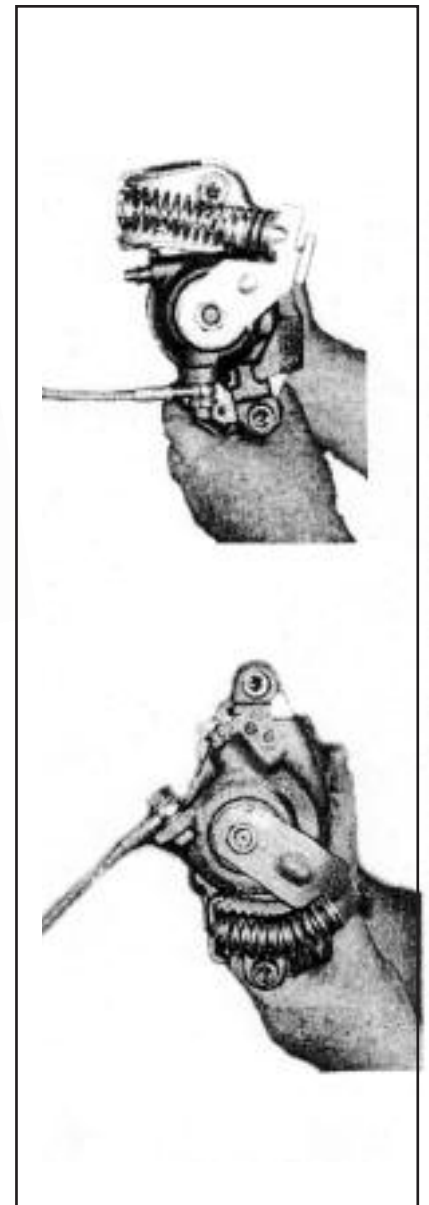
bleed screw in the 45° position. Bolt the top bracket to the base with the spacers between. (The bracket is spaced to the inside of the vehicle away from the rotor with the tubes facing in. 45 ft. lbs. dry/30 ft. lbs. lubed).

- (4) Install the rotors, making sure the surfaces that meet are clean with no projections that would make the rotors wobble. Hold rotors in place with a couple of wheel nuts.
- (5) Rotate the rotors and check for wobble, if there is any. Also check for interference in the mating surfaces. If not, then the axle and rotor bolted together should be faced to true up. Mark the position that it is bolted to the axle so that it can be reinstalled the same way if the rotors are ever removed.
- (6) Install the calipers so that the bleed screw is facing up. If it is facing down, use the other caliper. Make sure the projections on the bottom of the calipers don't touch the bracket. Slide sleeve inboard and on two piece brackets. Add or subtract spacers between base and top bracket to put the welded sleeve of the top bracket close to the ear of the caliper.
- (7) Use a flexible brake line to each caliper as they move with pad wear and when the brakes are applied.
- (8) Bleed the brakes and try out. If the back wheels skid before the fronts, you should install an adjustable proportioning valve to reduce the pressure to the rear brakes (follow gravity bleeding instructions in troubleshooting sheet especially for rear calipers).



# ADJUSTING AND BLEEDING EMERGENCY BRAKE CALIPERS

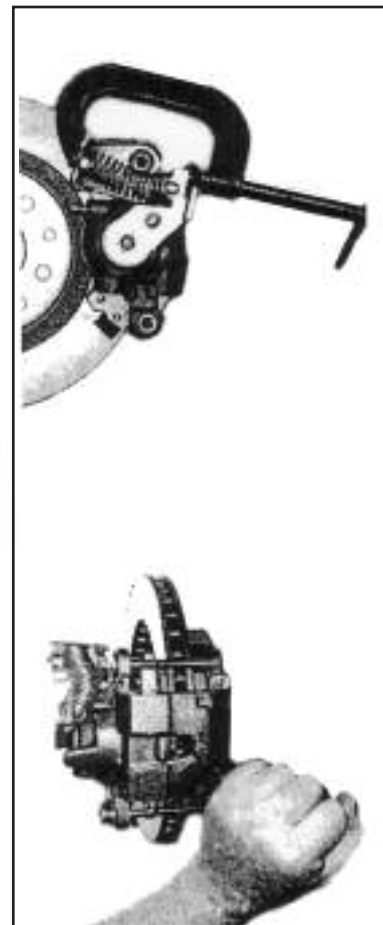
1. When you install the calipers, put them in the position you like, one where the cable will work well (if you have the park brake calipers) and the hose connection is in a good location. If you go off road you can mount the calipers high to avoid brush and rocks. Don't worry about being in the right position to bleed the brakes. The calipers have to be taken off the brackets to bleed anyway, and once they are bled it does not matter what position they are in.
2. Once everything is installed and before you put the wheels on, bleed the calipers. Air rises so the bleed screw must be at the top. You can start by using the normal bleeding methods, but the brakes will not work properly and you will have a soft pedal if you do not take the calipers off of the brackets and gravity bleed them to get the last of the air out.
3. To gravity bleed, remove the master cylinder cover, take the caliper off of the bracket and hold behind the axle. Hold the caliper so that the bleed screw points forward, horizontal with the ground on the (small) 5<sup>1/2</sup>-inch pin-to-pin calipers and straight up on the (large) 7-inch pin-to-pin calipers. The mounting holes in the ears are around 45° 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 also tap on the calipers with a rubber hammer to knock bubbles loose. Once the fluid is clear with no air bubbles, close the bleeder and hang that caliper on a wire and do the other side. Do both calipers again and then reinstall. (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 inch. 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. These are the only two ways we know of to adjust the parking brake. If the calipers won't adjust, you will have a low pedal because the piston will retract too far and will use



# IMPORTANT

up all 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 it will pump up, you still have air. Take the caliper 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 won't rattle. If your pedal is low and spongy, you have air. Remove the calipers and bleed them some more.



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