



CLASSIC PERFORMANCE PRODUCTS

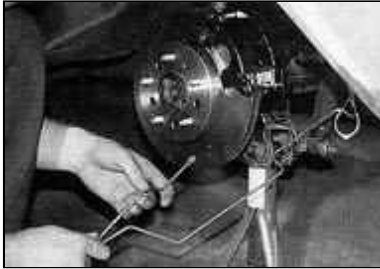
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Classic Performance Products

Converting to Rear Disc Brakes without breaking your wallet!

By Dominic Conti

Braking systems have long been ignored as a mandatory performance upgrade. The visual impact of cross-drilled rotors and racy looking multi-piston calipers looks great and stops even the heaviest of heavyweight cars, but the price tag is often out of the typical "street cruiser" budget. Welcome to the new century where everyone is trading in their huge rear tires and skinny front pizza cutters for 18-inch wheels and racy brakes (heck, even Popular Hot Rodding's Project X is being retrofitted to stop and handle!) So, how can we do this without shelling out big bucks and spending hours trying to retrofit our old Chevy with modern components?

Classic Performance Products (CPP) of Buena Park, California, has come to the rescue with disc brake conversion kits for everything from early Chevy

The kit includes rear disc brake calipers with a built-in emergency brake (OEM parts for '80-85 Cadillac Sevilles); 11-inch vented rotors, laser-cut caliper mounting brackets, rubber brake hoses, and all necessary mounting hardware. To complete the installation in style CPP offers cross-drilling and gas-slotting of the rotors, emergency brake cables, and custom-bent hard brake lines. Since all four corners of our Chevy will now be "modern" it was a given to update the master cylinder and the booster. CPP offers a custom master cylinder booster combo that's available in 7-, 8-, and 9-inch diameters (an 8-inch dual-diaphragm master cylinder is also available from CPP). Along with offering a variety of sizes, CPP engineered the booster to mount close to the firewall for improved valve cover clearance. The proper

To prove how easy the installation is, Chris Basset installed the rear brake kit and booster in his storage garage with basic hand tools. Chris wanted his classic '62 Bel-Air wagon to stop without having the annoying side-to-side pull usually associated with drum brakes, so he had already installed the front disc kit before we began our rear installation. After all of the CPP parts arrived, Chris quickly went to work upgrading his wagon. The installation was fairly straight forward.

Follow along to see just how easy it is to get vastly improved braking on your classic

trucks to 70s era muscle cars. One of the big advantages of the CPP kits is that most of the main components are OEM parts. The kits we designed to be a bolt-on installation, so even the average backyard mechanic with normal hand tools can complete the upgrade in about a day.

brake pedal ratio is incorporated into the design so the full travel of the master cylinder is used, resulting in a higher, firmer brake pedal. The complete kit includes your choice of booster size, Corvette master cylinder, and proportioning valve.



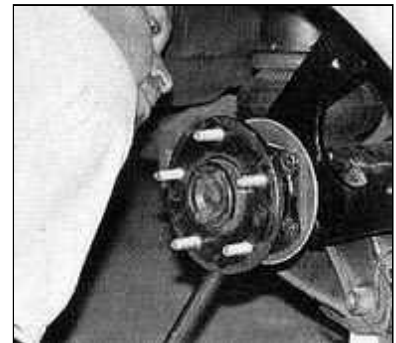
Classic Performance Products offers a complete bolt-on rear disc brake kit for most early Chevys as well as many muscle cars. Shown here is the complete rear disc brake kit for '55-'64 fullsize Chevys using an original rear axle (power brake booster and emergency brake cables are optional, but also available from CPP). This is a complete kit, with all necessary hardware and instructions.



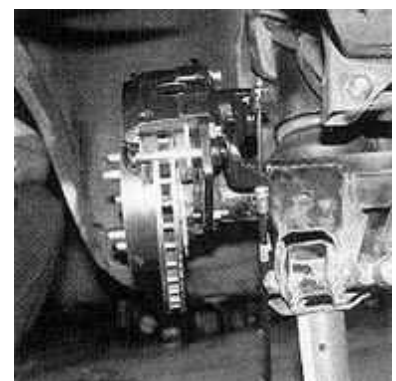
After properly setting the car on jackstands and removing the rear wheels, we proceeded to remove the drum and all of



To get the backing plate from between the axle housing and the shaft, we pulled the axle shaft out. Using a slide hammer and a few good pulls, ours popped right out.



The CPP caliper bracket installs between the metal spacer ring and the axle. The caliper bracket was sandwiched between our axle assembly before attempting to install the assembly. Once the axle is installed and all bolt holes are lined up, the caliper bracket mounting bolts were torqued to 50 ft-lbs.



the old braking components. We started by removing the brake shoes and then the rubber brake lines going to the wheel cylinders. Chris had ordered custom emergency brake cables (since the drum brake cables will not interchange), so we disconnected the old cables from their original starting point.



To remove the brake backing plates, you simply undo the four bolts that retain it on the axle. By pulling towards you, it will break loose.

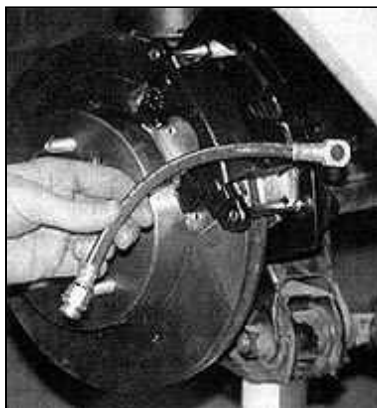


For a clean installation, Chris installed the optional hard brake line kit. With all

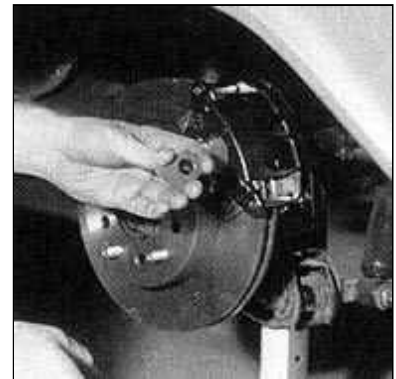
With the axle shaft removed, we cleaned the gear oil out of the axle housing where the new brake caliper brackets will mount. A new gasket (provided in the kit) is installed to insure a leak-free installation.



If it was determined that our wheel studs weren't long enough for our new brake/wheel combination. We went to the local auto parts store, found the length we needed, and pressed them in. Taking the longer bolts (to accommodate the new caliper bracket), we pre-installed them through the bearing retainer plate and slipped on the metal spacer ring.



Before installing the rotor, the boss that sticks out from the face of the axle was cleaned up so the rotor could easily slip on. We pre-installed the brake pads on our caliper, slid it over the rotor, lined up the holes, and bolted it up. This photo shows one of the most common mistakes with this kit---installing the caliper on the wrong side.



With the major work out of the way (and the calipers on the correct sides), it was time for the final details. The CPP kit includes mounting tabs for the rubber brake lines. For our installation we welded the tabs in place, but you can choose to bolt them in.



the pre-bending done for us, the installation was very straightforward, resulting in a perfect fit.

Having all new brake hardware made installing the new rubber brake lines a snap. To be sure that the emergency brake cables were long enough (or short enough), they were test fit on the car. We determined that the cables were the lengths necessary to operate properly, so we installed them, starting at the caliper side and working our way towards the front.

To finish off the package, a CPP booster with a Corvette master cylinder was installed. This was a simple installation, requiring the removal of the old brake booster, brake-lines, and proportioning valve. The CPP booster comes ready to mount with the proportioning valve mounted and brake warning light switch installed.

When we completed the disc brake conversion, no conclusions in the stopping power department could be made because the wagon was in the process of a major restoration. I took it amongst myself to test two different cars: one having drum brakes at all four corners, and one with four-wheel discs. The ride I will never forget was in my friend's '68 big-block Camaro (equipped with four-wheel drum brakes). When I put my foot in the car to do a full-throttle pass, I have to say it was quite thrilling, but little did I know my thrills were just about to begin! After taking my foot out of the throttle, I went for the brake pedal (expecting it to stop like a Corvette, I guess and to my surprise the car pulled to the left without seeming to slow down.

I let out of the brakes and tried again; this time I darted to the right, but at least I was slowing down. After catching my breath and finally slowing the Camaro down, I didn't think I was ready to do another braking evaluation (I did anyway). The next test subject was a '69 big-block Camaro that belongs to another "friend" of mine. The major difference is that this Camaro had the Classic Performance Products disc brake kit installed at all four-corners, CPP's power brake booster kit, braided-steel brake lines, and cross-drilled/gas-slotted rotors. While this car wasn't quite as powerful as Dave's Camaro, it could accelerate hard enough to paste you to the seat. While accelerating, all I could keep thinking about was stopping.

To my surprise the Camaro responded by slowing me down without the side-to-side pulling or brake fade that the drum-brake Camaro exhibited. The brake pedal felt firm and stayed high as I slowed the car down. In conclusion, I don't have any percentage statistics in braking or 60-zero mph times, but I can give you my personal opinion: Always consider a disc brake conversion when upgrading horsepower. The new "complete conversion kits" are readily available for most classics, easy to install, and within the budget of most "cruisers."

