

TRUCK STOP

Installing Wilwood disc brakes on a 2004 Chevy pickup truck

The Wilwood part number 140-8992-DR kit comes complete with the TC-6R red calipers, SRP drilled and slotted rotors, the caliper brackets, the BP-10 Smart Pads, and all of the hardware required to finish the installation.



The Wilwood part number 140-9407-DR kit comes complete with the W4A red rear calipers, SRP drilled and slotted rotors, the caliper brackets, the BP-10 Smart Pads and all of the hardware required to finish the installation. This system works perfectly with the factory parking brake system.



Chevrolet trucks have been setting sales records year after year because of their excellent construction and strong running engine selections. Chevy styling has always been ahead of the competition, and that started way back in the late '40s and early '50s. Nothing has changed because Chevy is still building beautiful trucks



that are built tough. The Chevy truck has also been a canvas for the artistic talents of car builders. Some Chevy trucks are ground scraping low, and are running on large diameter wheels and low profile tires. Some builders prefer just the opposite, and they lift the trucks and install muscular wheels and giant tires. The majority of the Chevy trucks on the road are just the way they came from the factory or they have small improvements with proven performance additions. One addition that can vastly improve a Chevy truck's stopping power is a set of Wilwood four-wheel disc brakes. It doesn't matter whether you have a low rider, a high rider or just a nice original truck you use for daily transportation, Wilwood disc brakes will make the truck safer and nicer to drive.

how nice many of the cars and trucks looked with Wilwood disc brakes, he talked to the owners to get their opinion of how well they worked. He found out that the brakes not only look terrific, they vastly improved the stopping power of all of the cars that were running them. That is all he needed to know to make the decision to call a Wilwood Engineering dealer, so he could order the brakes he needed. He wanted drilled and slotted rotors and red calipers so he ordered Wilwood part number 140-8992-DR for the front and 140-9407-DR for the rear. To make the changeover he also needed Wilwood part number 220-8998 front Flexlines and 220-8999 rear Flexlines. The addition of the new Wilwood brakes would make this truck look and stop better.

The owner of this 2004 Chevy pickup made a few custom improvements, and they included large diameter wheels and low profile tires. This is where the performance and appearance factor entered the owners mind. When he was looking through the windows of his beautiful new wheels, he was looking at the rusty original cast iron Chevy calipers and rusty rotors. When the owner was installing the wheels, he painted the original calipers black, but they were still unattractive. After attending a few car show and seeing how

Wilwood Engineering recommends persons experienced in the installation and proper operation of disc brake systems should only perform the installation of this kit. A hobby builder can install this kit if he has good mechanical ability, car building experience and a good assortment of tools. In order to complete this installation you need a floor jack and jack stands, an assortment of standard and metric wrenches including line wrenches, a variety of sockets and a socket wrench, an impact gun, a five inch grinder, a foot-pound torque wrench and an inch-pound torque wrench. Before the brake

starts it would be a good idea to spread all of the parts out so you can make sure that all of the parts are included in the kit. Check the parts with the parts list on the instruction sheet. We are

going to show you the installation to give you a chance to decide whether you want to install the system on your car, or have a professional do it for you.



The standard Chevy brakes left a lot to be desired in the appearance department with the cast iron rotor and caliper assembly. With the new large diameter six-spoke wheels the brakes were easily visible through the spokes.



The Wilwood caliper bracket will attach to the mounting ears used by the original caliper.



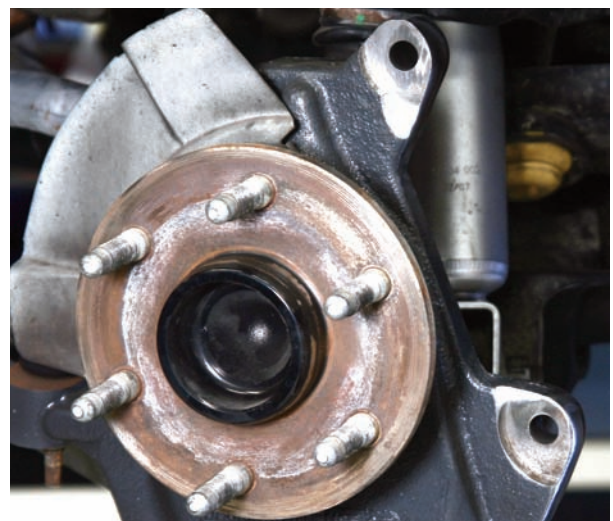
The bolts that secure the caliper to the bracket were disconnected and then the caliper was removed from the assembly.



Here is a good look at the modified bracket top and bottom before the caliper bracket was installed. Notice that some of the metal on top of the mounting hole also had to be removed.



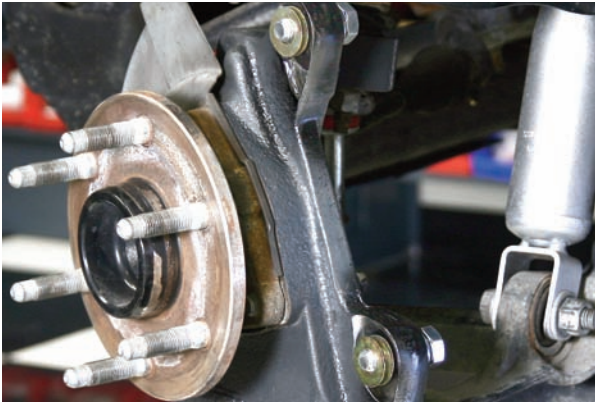
The rotor is riding on the centering ring, so it was loosened from the back with a few taps from a rubber mallet. When it was loose, the heavy rotor was lifted off of the spindle assembly.



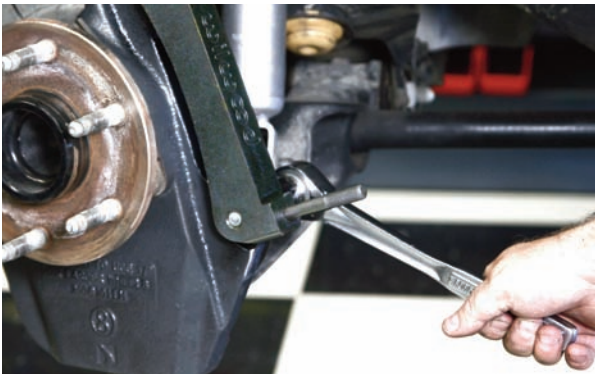
Here is a good look at the modified bracket top and bottom before the caliper bracket was installed. Notice that some of the metal on top of the mounting hole also had to be removed.



The face of the rotor was cleaned off with a wire brush. This area has to be clean, so the new rotor will seat properly.



The bracket bolts were installed in the bracket and then a couple of shims per hole were installed. The caliper has to be centered over the rotor and this can be done by adding or subtracting shims.



Here is the caliper bracket attached to the former caliper mounting holes. The shape and size of the bracket shows why clearance work was done.



Before the caliper was installed on the caliper bracket, the studs were loaded with two spacer washers.



The hub assembly has to be bolted to the rotor, so before that was done, the bolts were coated with Loctite 271. The rotor attaches to the hub with the mounting tabs facing the outside of the car.



After all of the rotor bolts were attached to the hub, they were tightened in an alternating sequence to 120-144 in-lbs. After all of the bolts were tight they were safety wired together following the safety wire diagram on the instruction sheet.



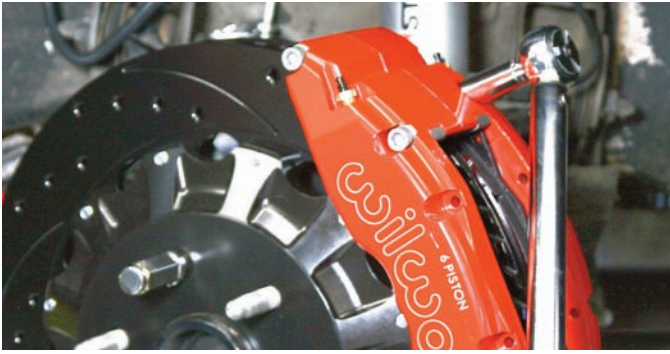
After the rotor was assembled and safety wired, it was installed on the rotor. The rotor was secured with two lug nuts so that the caliper to rotor centering could be checked and set.



The caliper inlet fitting threads were wrapped with Teflon tape and then the fitting was screwed into the caliper body.



The large red TC 6R caliper was attached to the mounting studs making sure two spacers per stud were used. This is a six-piston caliper that should provide plenty of stopping power for this truck.



After the caliper was riding on the studs, the washers were installed and the nuts were tightened to check the caliper to rotor centering. When the caliper is centered over the rotor, the caliper bolts can be tightened to 47 ft-lbs using a torque wrench.



When the centering was finished and the rotor was riding in the center of the caliper, the caliper bracket bolts could be tightened to 95 ft-lbs using a torque wrench.



After the pads were installed in the caliper, the two caliper bridge pad retainer bolts could be reinstalled. The outside radius of the rotor should align with the outside radius of the brake pads.



Here are the front brakes after the installation is complete. The black E-coated rotor is a nice complement to the red caliper. After the brakes have been bedded, the face of the rotor will be shiny silver and the rest of the caliper will remain black.



The Wilwood part number 220-8998 brake line was connected to the caliper and was routed up over the spindle to the frame mounted steel line. There is a bracket on the upper A-arm that will secure the line.



The wheels were removed from the rear brakes and here is what the original brake looks like. The owner painted the caliper black to improve its appearance.



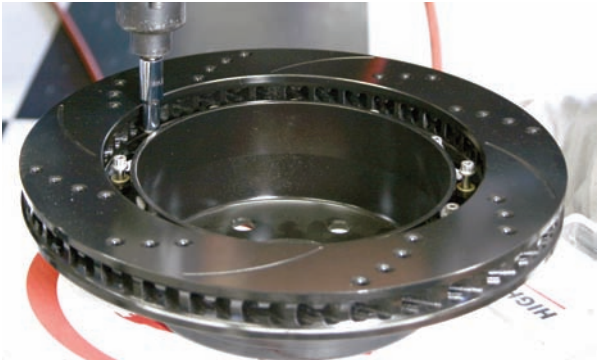
The caliper and rotor were removed, and that revealed the factory internal parking brake mechanism, and the backing plate that also acts as the internal brake drum. This system will remain intact.



The caliper bracket bolts were inserted through the caliper bracket and two shims per bolt were installed. The shims are used to center the rotor inside of the caliper, so more or less shims will be used when this process is finished.



The caliper was attached to the original caliper bracket with the bolts in the kit. Here the face of the hub assembly is being cleaned in preparation of installing the new rotor.



The rotor is being attached to the hat assembly using the bolts and washers supplied in the kit. The small bolts should be tightened to 103 in-lbs in an alternating pattern using an inch-pound torque wrench.



The rotor was connected to the rear hub assembly and it was secured with two lug nuts.



The caliper to rotor centering was checked and adjusted and when it was perfect the two caliper mounting nuts were tightened to 47 ft-lbs using a torque wrench. The caliper bracket bolts were coated with Loctite 271 and were also tightened to the factory specifications.



Here is the rear brake finished and ready to go through the brake bleeding and bedding process. The testing and bedding process instructions can be found in the back of the assembly instruction booklet.



Here is the front brake after the bedding process is complete. You can really see the brake system through the large windows in the large diameter wheels. You can also see how the rotor changes after a few stops showing the silver surface where the brake pads clean the surface of the rotor.



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From an appearance standpoint alone the Wilwood brakes certainly make a difference, but the owner is also pleased because the vehicle stops better than it did before. He said this is definitely a win-win experience.