

Wilwood Disc Brake Installation

Rear Big Brake Installation on a 2009 Chevy Truck / SUV 1500 Series



Wilwood has the perfect rear big brake kit to compliment our front big brake kit. The W4A coupled with our oversized GT asymmetrical face slotted rotor provides improved stopping while utilizing the original equipment brake show style parking brake.

This matching rear kit (P/N 140-9838) features Wilwood's W4A four-piston differential bore radial mount calipers clamping down on large 14.25" diameter, 1.25" thick rotors. The kit comes with aluminum hats, mounting brackets, and all hardware for an easy bolt-on installation. BP-10 high performance street pads round out the kit. Other brake pad compounds with higher friction and temperature characteristics designed for on track performance are an option. Kits are available with red or black powder coated calipers, and either GT asymmetrical face slotted rotors, or SRP drilled and slotted rotors.

As you read through the installation procedure you will see that it is basically a bolt-on kit, just as Wilwood advertises. Kit includes everything necessary for an easy and complete installation. However, the stainless steel braided flexline kit, P/N 220-8999 is a necessary item and must be ordered separately. You will be amazed as to how much better the Wilwood brake kit performs over the original factory brakes.

A standard set of mechanics tools including torque wrenches will be necessary. Also, a bottle of red *Loctite*® 271, PTFE thread tape, and Wilwood's Hi-Temp 570 racing brake



Wilwood part number 140-9838 comes complete with W4A calipers, caliper mounting brackets, GT rotors (SRP optional), aluminum hats, BP-10 brake pads and all necessary hardware for an easy bolt-on installation.

fluid (P/N 290-0632) or Wilwood EXP 600 Plus Hi-Temp racing brake fluid (P/N 290-6209) for extreme temperature applications.

Before you begin the installation, read over the instructions carefully to be sure you understand the procedure, and if the job seems a little beyond your capabilities, there's no shame in calling in a professional. Compare the parts you received with the parts list on the installation document that came with the kit to ensure all necessary components are included.

NOTE: *Disc brakes should only be installed by someone experienced and competent in the installation and maintenance of disc brakes. If you are not sure, get help or return the product. You may obtain additional information and technical support by calling Wilwood at 805 • 388-1188, e-mail for technical assistance at: support@wilwood.com, or visit our web site at www.wilwood.com.*



Sequence 1: Raise the rear wheels off the ground and support the rear suspension according to the vehicle manufacturer's instructions. Remove the lug nuts and lift off the wheel.



Sequence 4: The hat needs to be bolted to the rotor. Orient the rotor over the hat in the configuration shown above. Place one flat washer over each hole on the rotor mounting tabs. Apply red *Loctite*® 271 to the mounting bolts and slide through the washer and thread into the hat.



Sequence 2: Disconnect the OEM brake fluid hose where it connects to the brake hard line. Temporarily cap (not included) the line to minimize fluid loss. Using an impact driver or breaker bar and socket, break loose the caliper mounting bolts from the back side of the rotor. Lift off the caliper and keep the fluid line hose in the vertical position to avoid spilling brake fluid that remains in the hose.



Sequence 5: Using an alternating sequence, torque rotor bolts to 140 in-lbs.



Sequence 3: Slide off the rotor from the hub. If it is stuck, it may be necessary to hit it a few times with a rubber mallet to break loose.



Sequence 6: The dust shield needs to be trimmed on both the top and bottom openings for the Wilwood caliper mounting bracket to fit properly. Test fit bracket and trim as necessary. Paint newly exposed areas to prevent corrosion.



Sequence 7: Clean the hub assembly with a wire brush and remove any nicks, burrs, or grease that may interfere with installation of the new brake components.



Sequence 10: Lubricate the caliper mounting studs with lightweight oil. Initially place two shim washers on each stud between the bracket and caliper.



Sequence 8: Slide the original caliper mounting bolts through the caliper mounting bracket from the inboard side and place one washer on each bolt. Secure bracket to inboard side of caliper mounting ears. Temporarily tighten the mounting bolts. **NOTE:** The bracket must fit squarely against the mounting ears. Inspect for interference from casting irregularities, burrs, etc. Grind as necessary. Do not Loctite at this time.



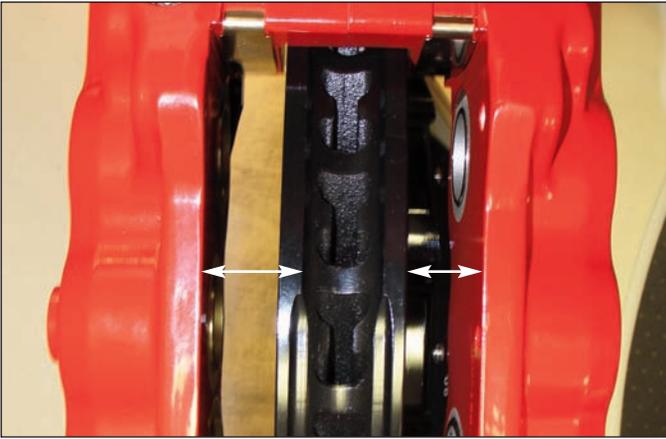
Sequence 11: This kit includes distinct right and left hand calipers. With the bleed screws pointing up, mount the caliper onto the bracket so that the largest pistons are at the rotor exit end of the caliper, in relation to the direction of rotor rotation.



Sequence 9: Install the hat/rotor assembly over the hub assembly. **NOTE:** The hat/rotor must fit flush against the axle hub flange or excessive rotor run out may result. Secure the hat/rotor with three lug nuts (finger tight) to keep the hat/rotor assembly in place while continuing with the installation.



Sequence 12: Secure the caliper with washer and locknut, temporarily tighten.



Sequence 13: View the rotor through the top opening of the caliper. The rotor should be centered in the caliper. If not, adjust by adding or subtracting shims between the bracket and the caliper mounting tabs. Once the caliper alignment is correct, remove the mounting bolts one at a time and apply red *Loctite*[®] 271 to the threads and torque to manufacturer's specification.



Sequence 16: After the pad height is set, install the pad retain pins and secure with the pin retainer clips. Then finalize the caliper mounting by torquing the caliper mounting lock nuts to 47 ft-lb.



Sequence 14: With the pad retain pins removed, insert the brake pads into the caliper with the friction material facing the rotor.



Sequence 17: Remove the protective sticker from the caliper fluid inlet. Coat the inlet fitting with PTFE thread tape and screw into the caliper. Connect one end of the Wilwood flexline hose kit, P/N 220-8999 to the fitting. Route flexline along the same path as the OEM hose.



Sequence 15: Check that the top of the brake pad is flush with the outside diameter of the rotor (arrow). If not, adjust by adding or subtracting shims between the bracket and the caliper.



Sequence 18: Connect the other end of the flexline to the fitting at the brake hard line. Secure line as necessary to prevent contact with moving suspension, brake, or wheel components. Bleed the system referring to the additional information in the data sheet as necessary for proper bleeding instructions.



Sequence 19: Install the wheel and torque the lug nuts to manufacturer's specification. Rotate the wheel and check for any interference. Bed in the brake pads and rotor in a safe location before general use driving.

Brake Testing

**WARNING • DO NOT DRIVE ON UNTESTED BRAKES
BRAKES MUST BE TESTED AFTER INSTALLATION OR MAINTENANCE
MINIMUM TEST PROCEDURE**

- Make sure pedal is firm: Hold firm pressure on pedal for several minutes, it should remain in position without sinking. If pedal sinks toward floor, check system for fluid leaks. DO NOT drive vehicle if pedal does not stay firm or can be pushed to the floor with normal pressure.
- At very low speed (2-5 mph) apply brakes hard several times while turning steering from full left to full right, repeat several times. Remove the wheels and check that components are not touching, rubbing, or leaking.
- Carefully examine all brake components, brake lines, and fittings for leaks and interference.
- Make sure there is no interference with wheels or suspension components.
- Drive vehicle at low speed (15-20 mph) making moderate and hard stops. Brakes should feel normal and positive. Again check for leaks and interference.
- Always test vehicle in a safe place where there is no danger to (or from) other people or vehicles.
- Always wear seat belts and make use of all safety equipment.

Wilwood Engineering

4700 Calle Bolero, Camarillo, CA 93012

805 / 388-1188 • www.wilwood.com

Copyright © 2012 Wilwood Engineering

All Rights Reserved