

Wilwood Disc Brake Installation

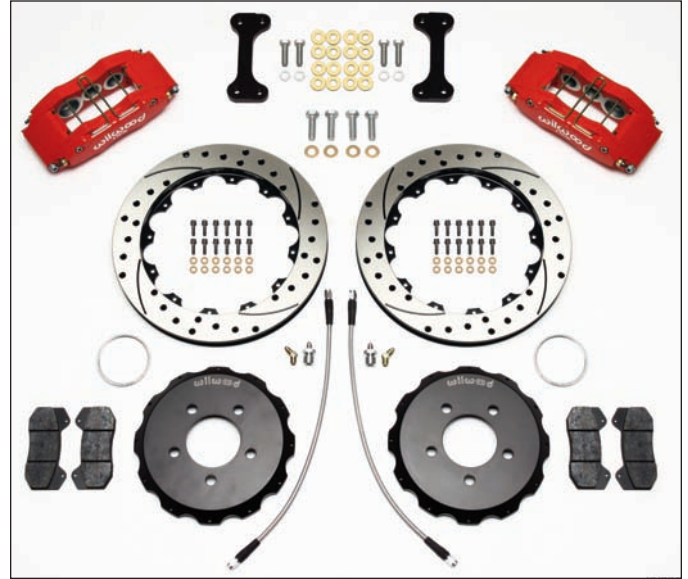
Front Big Brake Installation on a Factory Five Cobra



The Factory Five Roadster yields awesome performance with classic styling. However, when pushing these vehicles to the limit in track day or road race conditions, it becomes evident that updating the brake system can provide a competitive edge. This is clearly illustrated by the fact that more cars are passed under braking than anywhere else on the track. For over 30 years **Wilwood Disc Brakes** has had the solution! Now Wilwood brings all that racing experience to your Factory Five Roadster.

Wilwood's new front kit (P/N 140-12048) features Wilwood's DynaPro 6 six-piston differential bore lug mount calipers clamping down on oversized 12.88" diameter, 1" 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 slotted only or SRP drilled and slotted rotors. These kits were designed to fit under the Factory Five 17" Vintage Halibrand Replica wheel.

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 including the stainless steel braided flexline kit, P/N 220-12092.



Wilwood part number 140-12048 comes complete with DP6 calipers, caliper mounting brackets, GT rotors, aluminum hats, BP-10 brake pads and all necessary hardware for an easy bolt-on installation.

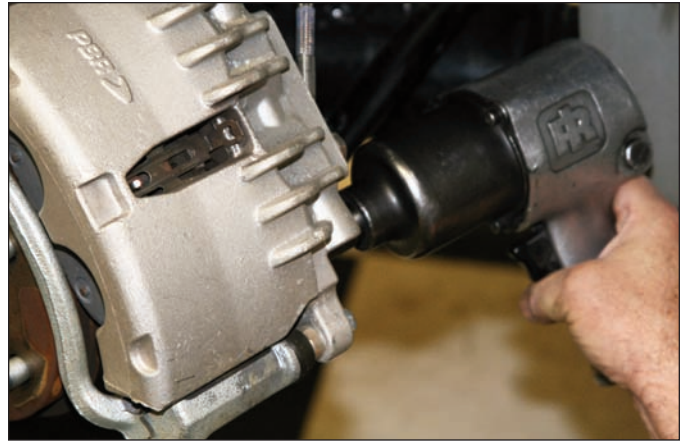
A standard set of mechanics tools are all that's required to install the brakes. If you built your own Roadster it's likely this brake kit won't be a problem. The only specialty tool required would be a torque wrench. Other items we recommend having handy are a bottle of red *Loctite*[®] 271, Teflon tape, and Wilwood's Hi-Temp 570 racing brake fluid or Wilwood EXP 600 Plus Hi-Temp racing brake fluid 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 knowledgeable and competent in the functioning 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 front wheels off the ground and support the front suspension according to the vehicle's manufacturer's instructions. Loosen the set screw behind the replica knock-off and lift off knock-off.



Sequence 4: Using an impact driver or breaker bar and socket, break loose the caliper mounting bolts from the back side of the rotor.



Sequence 2: Hiding behind the knock-off is the lug nuts, remove those and lift off the wheel.



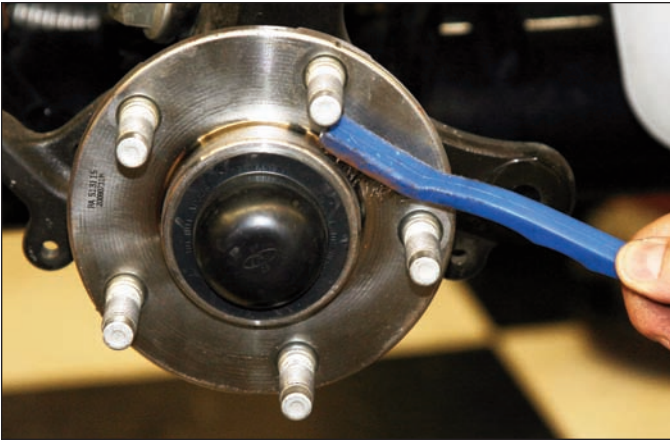
Sequence 5: Lift off the caliper and keep the OEM brake line hose in the vertical position to avoid spilling brake fluid that remains in the hose.



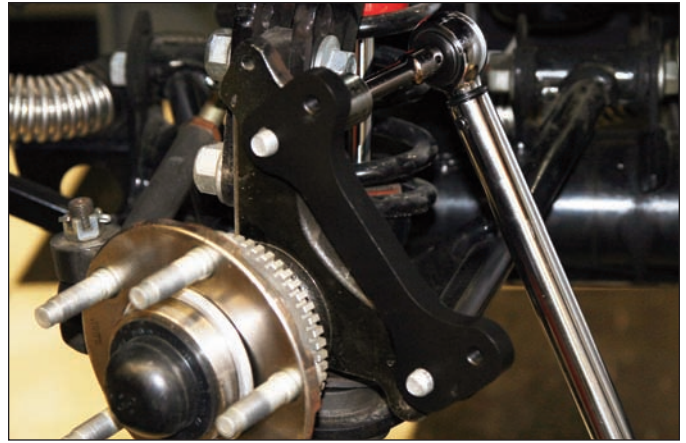
Sequence 3: Disconnect the OEM brake fluid hose where it connects to the brake hard line. Temporarily cap (not included) the line to minimize fluid loss.



Sequence 6: 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 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.



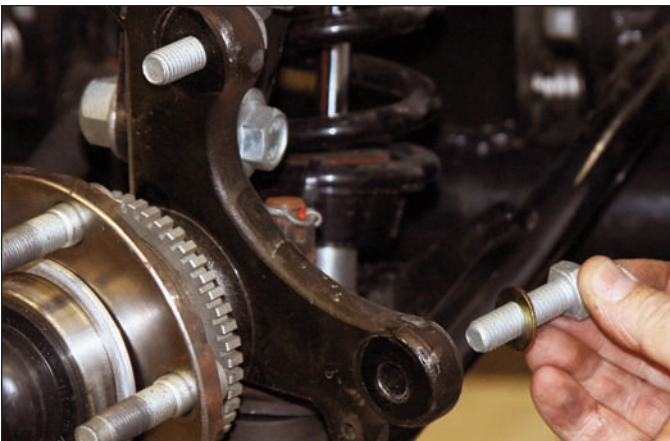
Sequence 10: Attach the Wilwood caliper mounting bracket to the OEM mounting ears on the outboard side. Temporarily tighten the mounting bolts. **NOTE:** The bracket must fit squarely against the mounting ears. Inspect for interference from casting irregularities, burrs, etc. Grind as necessary. Remove the bolts one at a time and coat with red *Loctite*® 271, torque to 65 ft-lbs.



Sequence 8: Install the rotor registration adapter over the hub dust cap against the hub face with the larger O.D. facing inward toward the hub face.



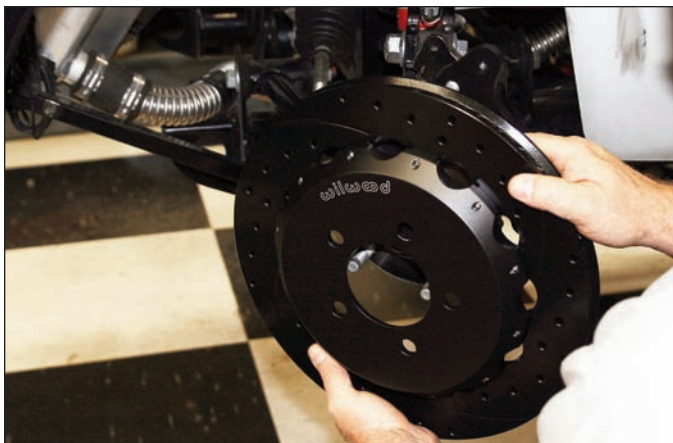
Sequence 11: The hat needs to be bolted to the rotor. Orient the rotor over the hat in the configuration shown above.



Sequence 9: Slide the caliper bracket mounting bolts with washer thru OEM caliper mounting ears from the inboard side.



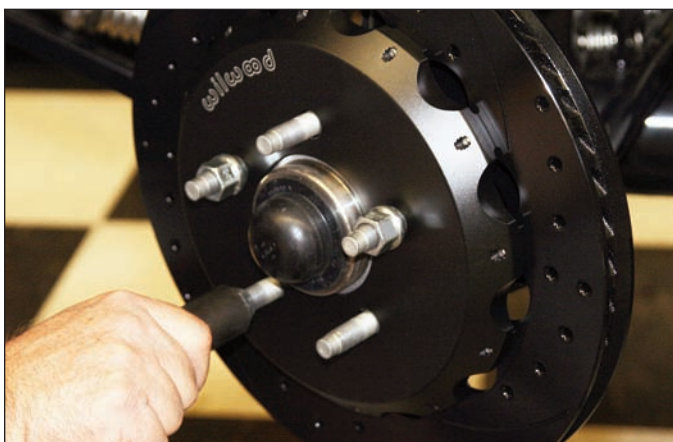
Sequence 12: Place one flat washer over each hole on the rotor mounting tabs. Coat the mounting bolts with red *Loctite*® 271 and slide through the washer and thread into the hat. Using an alternating sequence, torque bolts to 155 in-lbs.



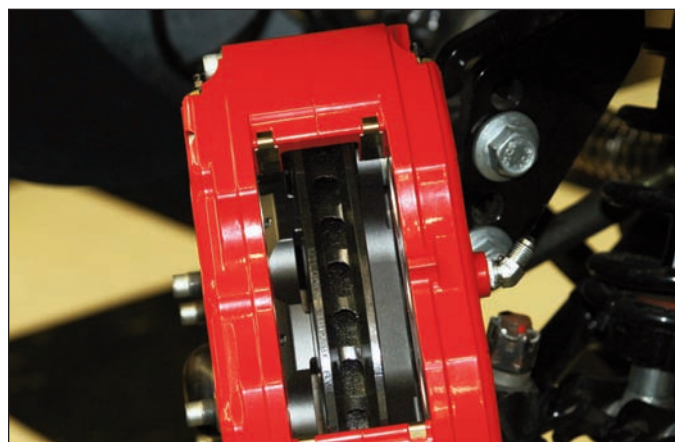
Sequence 13: Install the hat/rotor assembly over the hub assembly. **NOTE:** The hat/rotor must fit flush against the axle hub flange or excessive rotor run out may result.



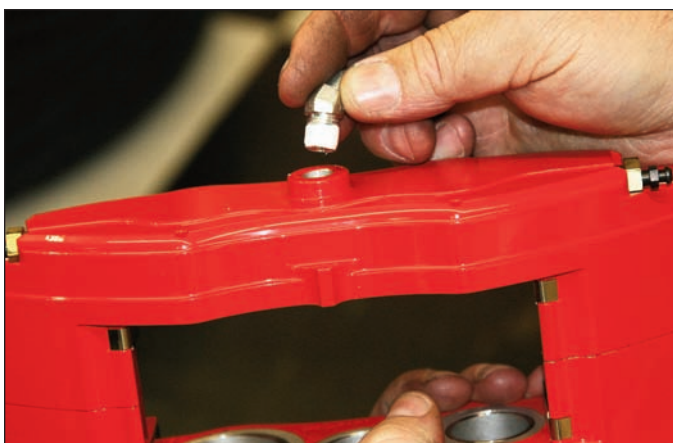
Sequence 16: Initially place three shim washers on each bolt between caliper mounting tab and the mounting ears on the bracket.



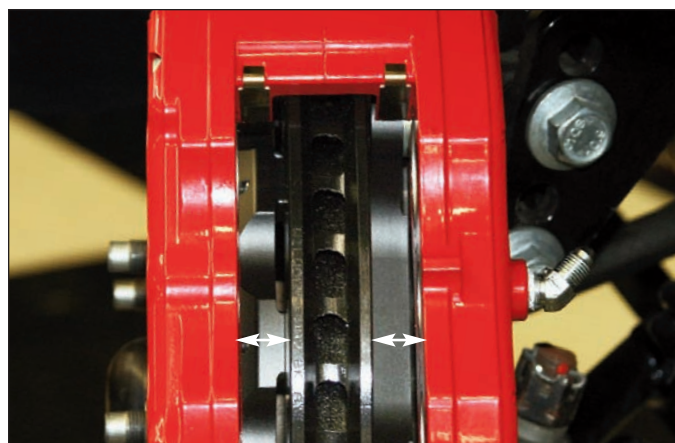
Sequence 14: Secure the hat/rotor with three lug nuts (finger tight) to keep the hat/rotor assembly in place while continuing with the installation.



Sequence 17: 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.



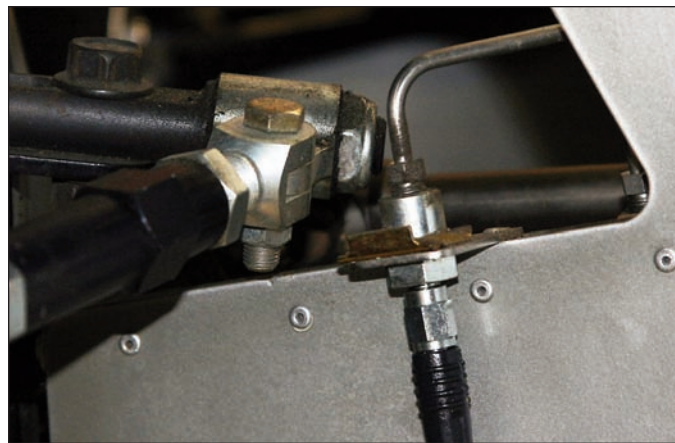
Sequence 15: Remove the protective sticker from the caliper fluid inlet. Coat the inlet fitting with Teflon tape and screw into the caliper with the 45° angle perpendicular to the length of the caliper.



Sequence 18: 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 40 ft-lbs.



Sequence 19: Insert the brake pads into the caliper with the friction material facing the rotor.



Sequence 21: Connect one end of the flexline to the previously installed caliper fitting. Route line along the same path as the OEM hose and 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 20: Secure brake pads in place with the pad clip retainer.



Sequence 22: Install the wheel and torque the lug nuts to manufacturer's specification. Rotate the wheel and check for any interference. Reinstall the replica knock-off's. 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.

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