

## Wilwood Disc Brake Installation

### Front Installation on a 1949 Buick



You can now have the legendary cutting edge performance and quality of Wilwood Brakes Kits for all 1941-1956 Buick's. These high quality lightweight conversion brake kits are designed to bolt directly on to the stock spindle without any modifications. Should you desire to do so, you can easily reverse the operation and reinstall your drum brakes at a later date. Kit offers a restored appearance while providing the enhanced stopping ability of disc brakes for driving safety and is compatible with the original equipment master cylinder. Since 1977 **Wilwood Disc Brakes** has had the solution!

Wilwood's new front kit (P/N 140-12321) features Wilwood's Dynalite four-piston lug mount calipers clamping down on 11.88" diameter, 1.29" thick rotors. The kit comes with integrated hub/rotors, including bearing and seals, 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 come standard with black calipers, but red and other Wilwood colors are available by special order.

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 except new hoses. Stainless steel braided flexline hose kit, part number 220-12296 is necessary, but not included with the kit and must be ordered separately.



Wilwood part number **140-12321** comes complete with Dynalite calipers, caliper mounting brackets, integrated rotors/hubs, BP-10 brake pads and all necessary hardware for an easy bolt-on installation.

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 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 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](mailto:support@wilwood.com), or visit our web site at [www.wilwood.com](http://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. Remove the lug nuts, then slide off the wheel.



**Sequence 4:** Unscrew the spindle nut. **NOTE:** The spindle threads are left hand on the driver's side and right hand on the passenger's side.



**Sequence 2:** Remove the dust cap.



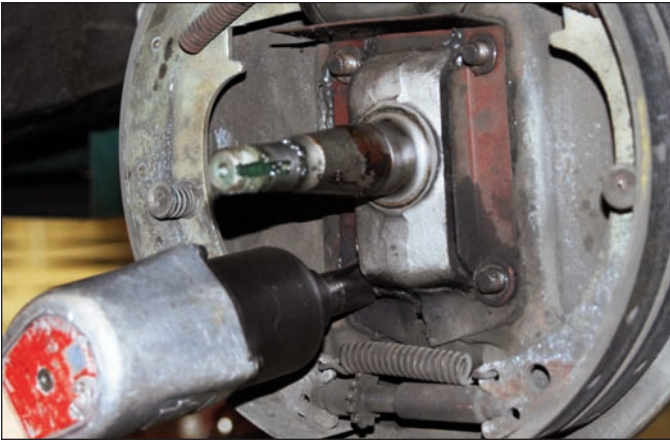
**Sequence 5:** Lift off the brake drum and set aside.



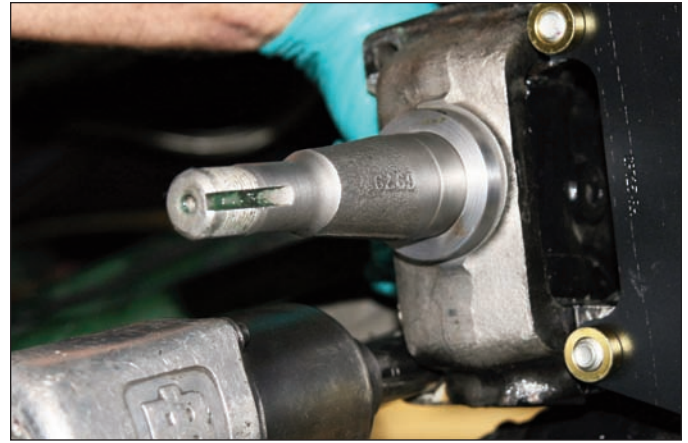
**Sequence 3:** Straighten out the cotter pin and remove.



**Sequence 6:** Straighten and remove the two cotter pins that secure the two bottom bolts holding in place the drum brake assembly and steering arm.



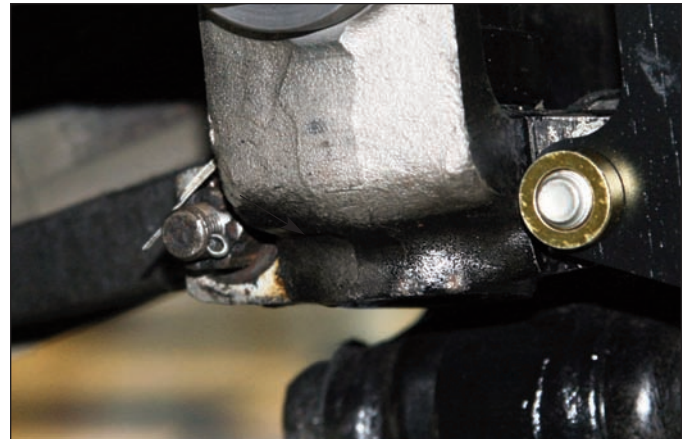
**Sequence 7:** Remove all four nuts that secure the backing plate. Remove the mounting clip and disconnect the OEM rubber brake hose from the hard line. Cap line to keep fluid leakage to a minimum. Completely remove drum assembly.



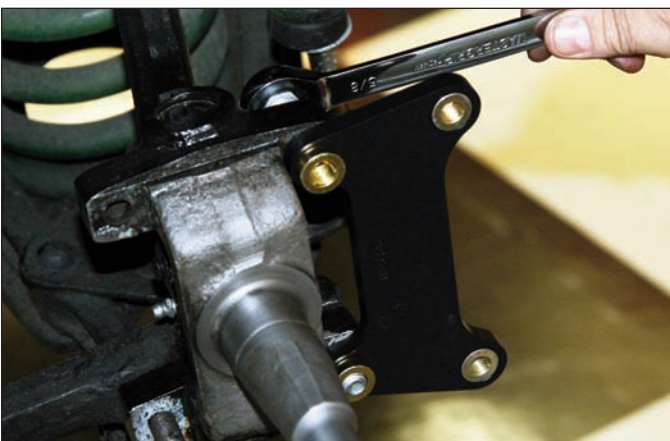
**Sequence 10:** Discard the top OEM bolt from the rear side of the spindle ears. Reinstall the bottom bolt and nut which attaches to the steering arm. Torque bolt to manufacturer's specifications.



**Sequence 8:** Remove the two OEM bolts from the front side of the spindle and replace with new bolts from the caliper bracket bolt kit. Apply blue *Loctite*® 242 to the bolt threads before installation of caliper bracket.



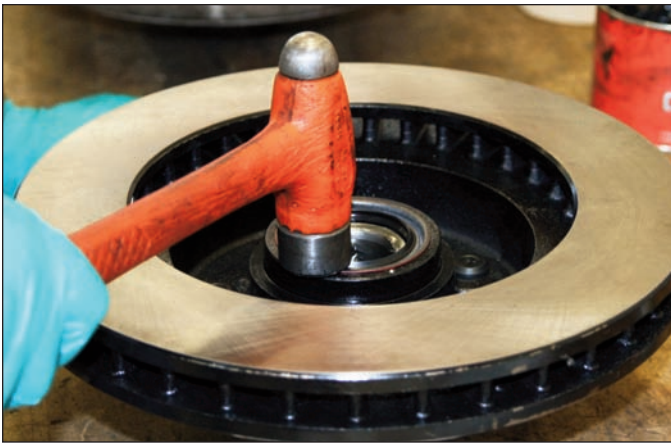
**Sequence 11:** Install new cotter pin (not supplied) to secure the nut that secures spindle to the steering arm.



**Sequence 9:** Attach the Wilwood caliper mounting bracket to the OEM mounting ears on the outboard side making sure clinch nuts are facing outward. **NOTE:** *The bracket must fit squarely against the mounting ears.* Inspect for interference from casting irregularities, burrs, etc. Grind as necessary. Torque bolts to 60 ft-lbs.



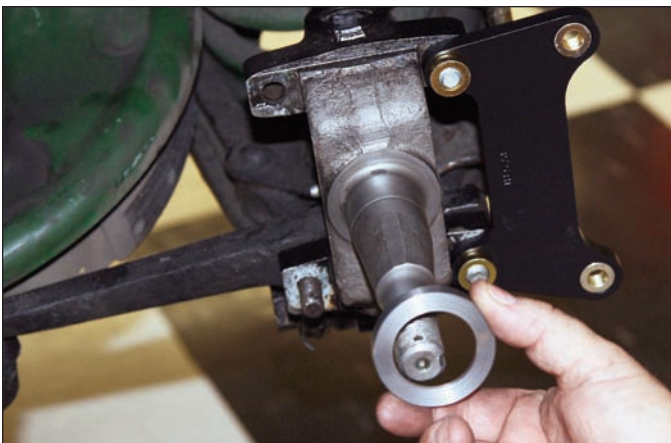
**Sequence 12:** Pack the large inner bearing cone with high temperature disc brake bearing grease (available from your local auto parts store) and install into the backside of the hub/rotor.



**Sequence 13:** Install the grease seal by pressing into the backside of the hub/rotor, flush with the end of the hub section.



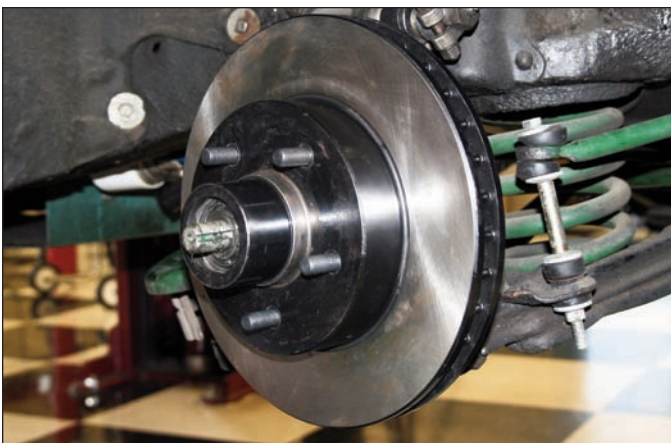
**Sequence 16:** Install spacer onto the spindle followed by the spindle washer.



**Sequence 14:** Slide the hub/rotor spindle spacer onto the spindle being sure to have the chamfer edge inward.



**Sequence 17:** Install spindle nut. Adjust bearings by tightening the wheel bearing nut to 60 in-lbs. while turning the hub/rotor assembly. Back off the adjusting nut one slot and install a new cotter pin (not supplied). The resulting adjustment should be zero (no pre-load to 0.003 inch end play).



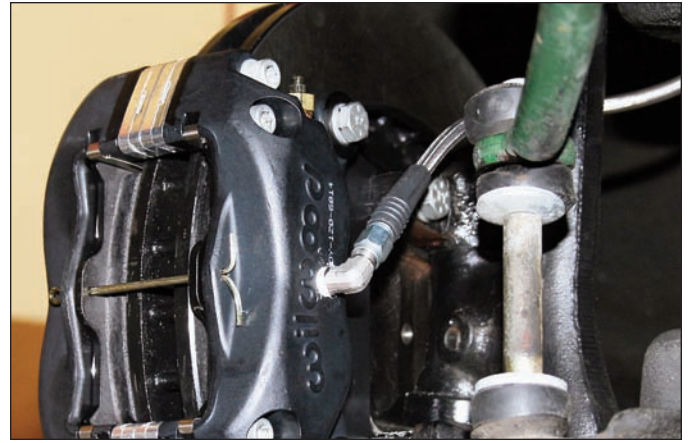
**Sequence 15:** Grease the non-threaded portion of the spindle and slide on the hub/rotor assembly. Pack the outer bearing with grease and slide onto the spindle and into the hub/rotor.



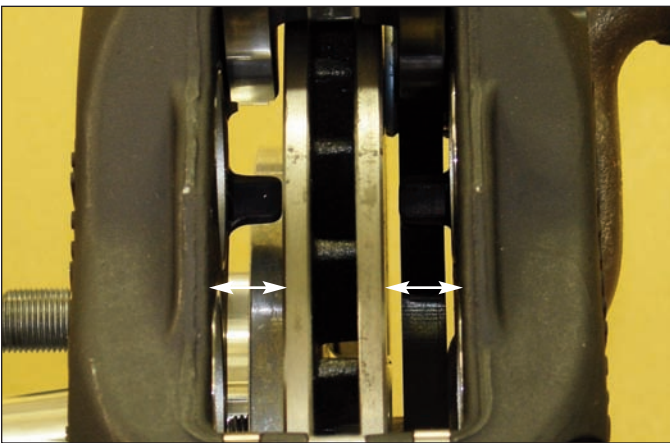
**Sequence 18:** Remove the protective sticker from the caliper fluid inlet. Wrap the inlet fitting with PTFE thread tape and screw into the caliper in the vertical up position with the fitting angled approximately 45° toward the hard line.



**Sequence 19:** Initially place two shim washers on each bolt between caliper mounting tab and the mounting ears on the bracket.



**Sequence 22:** Connect one end of the flexline to the previously installed caliper fitting. Route line along the same path as the OEM hose.



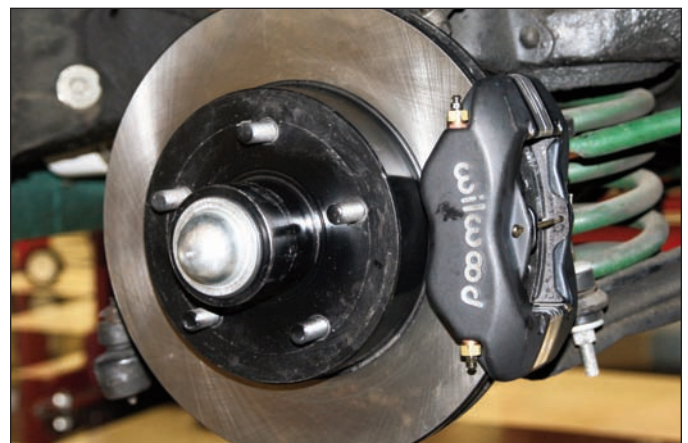
**Sequence 20:** Temporarily tighten mounting bolts and view the rotor through the top opening of the caliper. The rotor should be centered in the caliper. If not, adjust by adding or subtracting shims between the bracket and the caliper mounting tabs. Once the caliper alignment is correct, remove the mounting bolts one at a time and apply red *Loctite*® 271 to the threads and torque to 40 ft-lbs.



**Sequence 23:** Connect the other end of the flexline to the fitting at the brake hard line and install new clip. 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 21:** Insert the brake pads into the caliper with the friction material facing the rotor.



**Sequence 24:** Position oil seal on dust cap and install cap and wheel. Torque lug nuts to manufacturer's specifications. 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 Disc Brakes**

4700 Calle Bolero, Camarillo, CA 93012

805 / 388-1188 • [www.wilwood.com](http://www.wilwood.com)

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