

# Wilwood Disc Brake Installation

## Rear ProMatrix Brake Installation on a 2005 Ford Mustang GT



Wilwood has the perfect rear ProMatrix kit to compliment our front Mustang GT ProMatrix kit. This kit offers improved performance while retaining the parking brake functionality.

Wilwood's new rear ProMatrix kit (P/N 140-12149-D) features 11.81" diameter, .76" thick rotors. The kit comes with integrated hat/rotors which blends seamlessly with the original equipment parking brake function for an easy bolt-on installation. ProMatrix 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.

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 220-12350.

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.



Wilwood part number 140-12149-D comes complete with SRP drilled and slotted integrated hat/rotors, ProMatrix brake pads and all necessary hardware for an easy bolt-on installation.

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](mailto:support@wilwood.com), or visit our web site at [www.wilwood.com](http://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:** Using a flat head screw driver pry off the rotor retaining washers from around the wheel studs.



**Sequence 2:** Using a breaker bar and socket or wrench, break loose the caliper mounting bolts from the back side of the rotor.



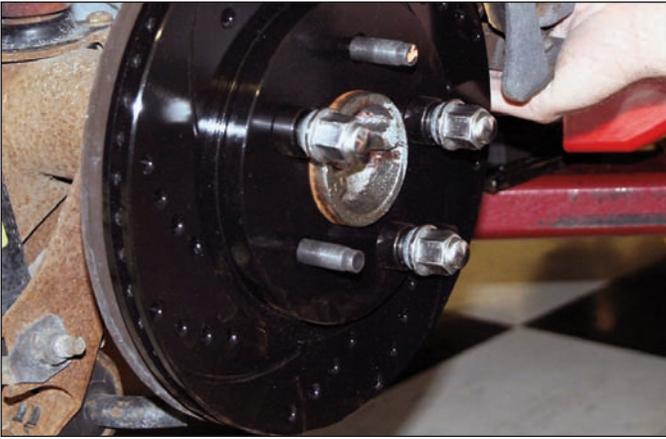
**Sequence 5:** Slide off the rotor from the hub. If it is stuck, it may be necessary to hit it a few times with a rubber mallet to break loose.



**Sequence 3:** Lift off the caliper and hang off to the side using a piece of wire.



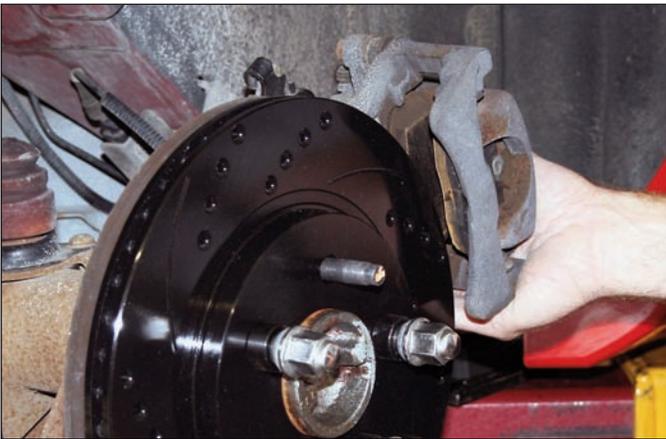
**Sequence 6:** Install the rotor over the hub assembly. **NOTE:** The rotor must fit flush against the axle hub flange or excessive rotor run out may result.



**Sequence 7:** Secure the rotor with three lug nuts (finger tight) to keep the rotor in place while continuing with the installation.



**Sequence 10:** Slip the new mounting bracket over the Wilwood flexline and secure with clip.



**Sequence 8:** Remove the original brake pads from the caliper and insert new Wilwood brake pads with the friction material facing the rotor.



**Sequence 11:** Disconnect the OEM brake fluid hose where it connects to the brake hard line. Connect the new flexline to the hard line.



**Sequence 9:** Reinstall the caliper in its original location and torque the mounting bolts to manufacturer's specification.



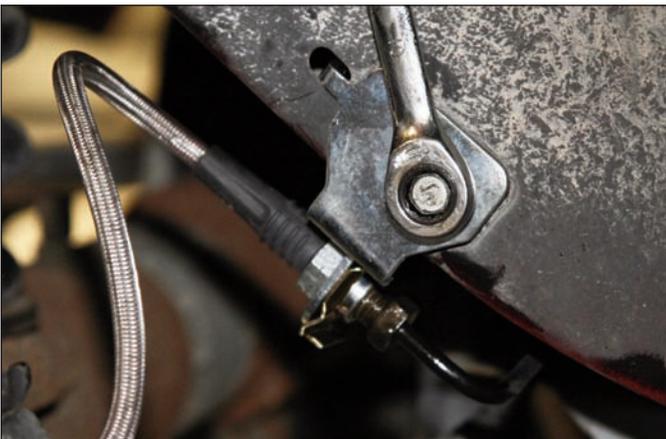
**Sequence 12:** Disconnect the other end of the rubber hose from the caliper. Try to keep fluid leakage to a minimum.



**Sequence 13:** Remove the old mounting bracket from the chassis. Save the mounting bolt.



**Sequence 16:** Secure fluid 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 14:** Secure the new mounting bracket to the chassis using the saved OE bolt.



**Sequence 17:** 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.



**Sequence 15:** Route line along the same path as the OEM hose and connect the other end of the flexline to the caliper.

## 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**

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