Wilwood 160-1601

Wilwood 1601601 Brake Rotor Kit Instruction Manual

Brand: Wilwood | **Model:** 160-1601

Product Overview

Wilwood Engineering designs and manufactures high-performance disc brake systems. Since the company's inception in 1977 by Bill Wood, they have developed a substantial matrix of brake components and engineering techniques that allow them to quickly and reliably create brake systems for almost any application. This manual provides essential information for the installation, operation, and maintenance of your Wilwood 1601601 Brake Rotor Kit.

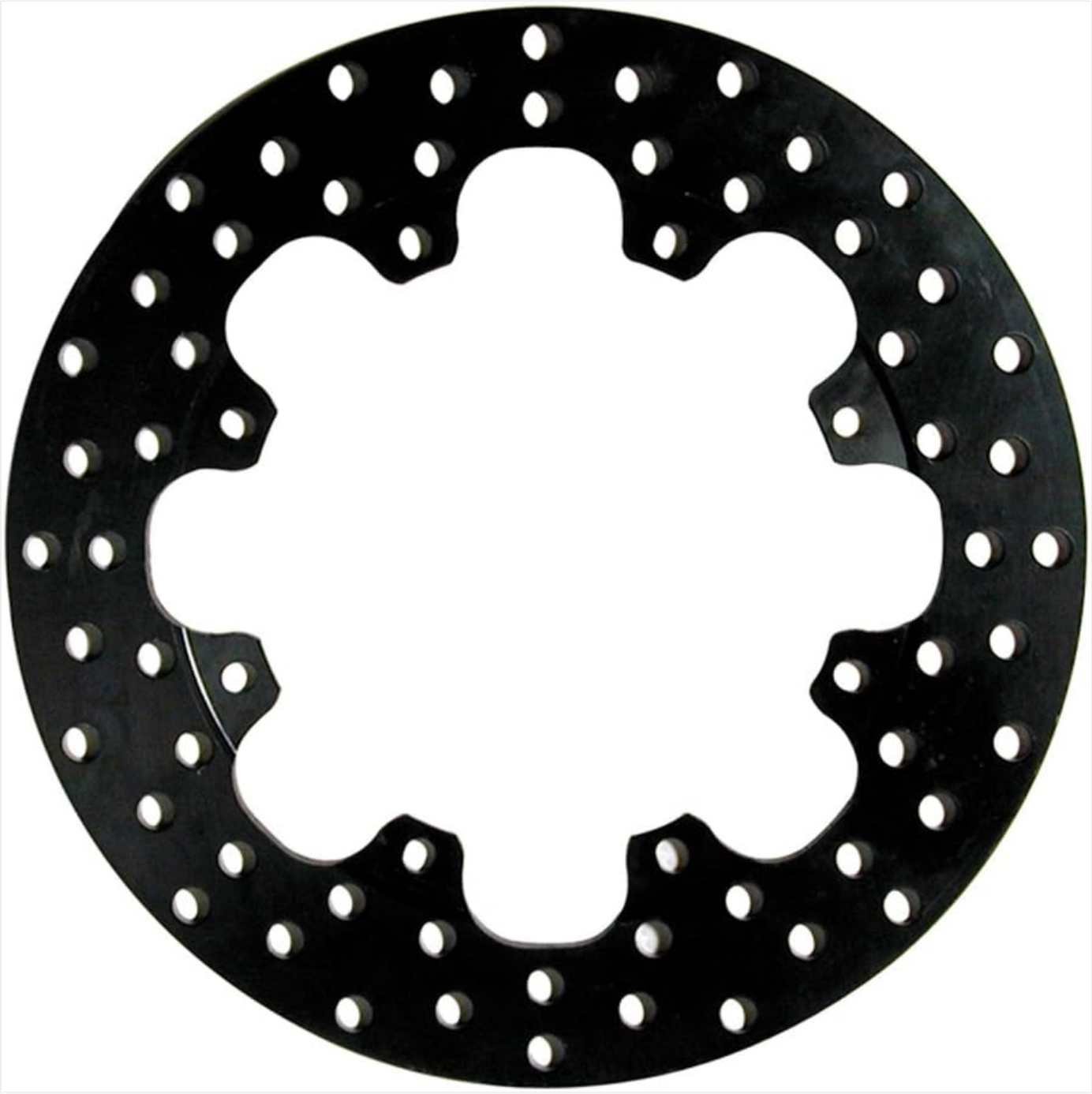

Image: A black, drilled brake rotor with a distinctive multi-lobed center opening, designed for high-performance braking systems.

Setup and Installation

Proper installation is crucial for the safe and effective operation of your brake rotor. If you are not experienced with automotive brake systems, it is highly recommended to seek professional assistance.

Safety Precautions

- Always wear appropriate personal protective equipment (PPE), including safety glasses and gloves.
- Ensure the vehicle is securely supported on jack stands or a lift before beginning work.
- Allow brake components to cool completely before handling.
- Refer to your vehicle's service manual for specific torque specifications and procedures.

Tools Required (General)

- Socket/Wrench Set

- Torque Wrench
- Brake Cleaner
- Wire Brush
- C-Clamp or Brake Caliper Piston Tool
- Jack and Jack Stands

Installation Steps (General)

1. **Prepare Vehicle:** Park the vehicle on a level surface, engage the parking brake, and loosen lug nuts on the wheel to be serviced. Lift the vehicle and secure it with jack stands. Remove the wheel.
2. **Remove Caliper:** Unbolt and carefully remove the brake caliper from its mounting bracket. Do not let the caliper hang by the brake hose; support it with a wire or bungee cord.
3. **Remove Old Rotor:** Remove any retaining screws or clips holding the old rotor in place. The rotor should slide off the wheel hub. If stuck, gently tap the back of the rotor with a rubber mallet.
4. **Clean Hub Surface:** Thoroughly clean the wheel hub mounting surface with a wire brush and brake cleaner to remove any rust or debris. A clean, flat surface is essential for proper rotor seating.
5. **Install New Rotor:** Carefully slide the new Wilwood brake rotor onto the wheel hub, ensuring it sits flush against the mounting surface. Secure with any retaining screws or clips if applicable.
6. **Reinstall Caliper:** If replacing brake pads, do so now. Compress the caliper piston(s) as needed. Reinstall the brake caliper onto its mounting bracket and tighten bolts to vehicle manufacturer's specifications.
7. **Bleed Brakes (if necessary):** If brake lines were opened or air entered the system, bleed the brakes according to your vehicle's service manual.
8. **Final Checks:** Reinstall the wheel, lower the vehicle, and torque lug nuts to specifications. Pump the brake pedal several times to ensure firm pedal feel before driving.

Operating and Break-In Procedures

New brake rotors and pads require a proper break-in period to ensure optimal performance and longevity. This process helps to bed the pads to the rotor surface and remove any manufacturing residues.

Brake System Break-In

1. Find a safe, open area where you can perform several stops without interruption.
2. Accelerate to approximately 35 mph (56 km/h) and apply moderate brake pressure to slow down to about 5 mph (8 km/h). Do not come to a complete stop.
3. Repeat this process 8-10 times, allowing a short cool-down period between each stop to prevent overheating.
4. After the initial series of stops, drive for several miles without heavy braking to allow the brakes to cool down completely.
5. Avoid hard braking or emergency stops for the first 200-300 miles (320-480 km) after installation.

During the break-in period, you may notice some light smoke or a distinct odor. This is normal and indicates the bedding process is occurring. Consistent, firm pedal pressure should be maintained during normal operation.

Maintenance

Regular inspection and maintenance will help ensure the longevity and performance of your Wilwood brake rotors.

Inspection Schedule

- Inspect rotors for wear, cracks, or scoring at every tire rotation or at least every 10,000-15,000 miles (16,000-24,000 km).

- Check for excessive rust buildup, especially on the rotor hat or non-friction surfaces.
- Measure rotor thickness to ensure it is within manufacturer's minimum specifications.

Cleaning and Care

- Use a dedicated brake cleaner to remove brake dust and grime from the rotor surface.
- Avoid using harsh chemicals or abrasive materials that could damage the rotor finish or friction surface.
- Ensure proper ventilation when cleaning brake components.

Replacement

Brake rotors are wear items and will eventually need replacement. Replace rotors if they show signs of severe wear, deep scoring, cracking, warping, or if their thickness falls below the minimum specified by Wilwood or your vehicle manufacturer.

Troubleshooting

This section addresses common issues that may arise with brake rotors and provides potential solutions.

Symptom	Possible Cause	Solution
Brake Noise (Squealing/Grinding)	New pads/rotors not bedded, worn pads, foreign object, improper installation.	Perform break-in procedure, inspect pads for wear, check for debris, re-install correctly.
Brake Pedal Pulsation/Vibration	Rotor runout (warping), uneven pad deposits, loose wheel bearings.	Inspect rotors for runout, re-bed pads, check wheel bearings. Replace rotors if warped.
Reduced Braking Performance	Overheating, worn pads/rotors, contaminated friction surfaces.	Allow brakes to cool, inspect and replace worn components, clean contaminated surfaces.
Excessive Brake Dust	Normal for some pad compounds, or aggressive driving.	Regular cleaning. Consider different pad compound if excessive.

If troubleshooting steps do not resolve the issue, consult a qualified automotive technician.

Specifications

Key specifications for the Wilwood 1601601 Brake Rotor Kit are provided below:

Attribute	Value
Manufacturer	Wilwood
Model Number	160-1601
Item Weight	4.66 pounds
Product Dimensions	13.39 x 13.39 x 1.97 inches
Material	Alloy Steel
Exterior Finish	Painted
Manufacturer Part Number	1601601

Attribute	Value
Position	Rear
Country of Origin	UNITED STATES
Fit Type	Universal Fit

Warranty Information

Specific warranty details for the Wilwood 1601601 Brake Rotor Kit are provided by the manufacturer. Please refer to the official Wilwood website or contact Wilwood customer service for the most current and comprehensive warranty policy.
Note: Warranty coverage typically applies to manufacturing defects and does not cover normal wear and tear or damage due to improper installation or misuse.

Support and Contact

For technical support, product inquiries, or assistance with your Wilwood brake rotor, please contact Wilwood Engineering directly or an authorized Wilwood dealer.
Wilwood Engineering Official Website: www.wilwood.com
Please have your product model number (160-1601) and any relevant purchase information ready when contacting support.