

Dorman W45872

Dorman W45872 Front Passenger Side Drum Brake Wheel Cylinder Instruction Manual

For Select Buick, Chevrolet, and Oldsmobile Models

1. PRODUCT OVERVIEW

The Dorman W45872 Drum Brake Wheel Cylinder is a direct replacement component designed to match the fit, function, and performance of the original wheel cylinder in specific vehicle applications. This component is crucial for the proper operation of drum brake systems, converting hydraulic pressure from the master cylinder into mechanical force to engage the brake shoes against the drum.

This wheel cylinder is manufactured with high-quality EPDM rubber cups and boots to ensure long-lasting performance and is surface-tested to provide an optimum sealing surface for the pressure cups.



Figure 1: Main view of the Dorman W45872 Drum Brake Wheel Cylinder. This image shows the primary body of the

cylinder, including the bleeder screw and mounting points, essential for its function within the drum brake assembly.

2. INSTALLATION INSTRUCTIONS

Proper installation is critical for brake system safety and performance. If you are not experienced with brake system repairs, it is recommended to seek professional assistance. Always refer to your vehicle's specific service manual for detailed procedures.

2.1 Safety Precautions

- Always wear appropriate personal protective equipment (PPE), including safety glasses and gloves.
- Ensure the vehicle is securely supported on jack stands on a level surface. Never rely solely on a jack.
- Disconnect the negative battery terminal before starting work.
- Avoid contact with brake fluid, as it can damage paint and irritate skin.
- Do not reuse old brake fluid.

2.2 Required Tools and Materials

- Jack and jack stands
- Wheel lug wrench
- Brake fluid (new, correct type for your vehicle)
- Line wrenches (flare nut wrenches)
- Socket/ratchet set
- Brake cleaner
- Bleeder wrench or vacuum bleeder kit
- Drain pan for brake fluid

2.3 Installation Steps

1. **Prepare the Vehicle:** Park the vehicle on a level surface, engage the parking brake, and block the wheels. Loosen the lug nuts on the wheel to be serviced, then raise the vehicle and secure it with jack stands. Remove the wheel.
2. **Remove Brake Drum:** Carefully remove the brake drum. If it is stuck, use a rubber mallet to tap around the edges or consult your vehicle's service manual for specific removal procedures.
3. **Disassemble Brake Shoes:** Note the position of all springs, clips, and retainers. Take photos if necessary. Disconnect the brake shoes from the old wheel cylinder.
4. **Disconnect Brake Line:** Using a line wrench, carefully loosen and disconnect the brake line from the rear of the old wheel cylinder. Be prepared for brake fluid to leak; use a drain pan.
5. **Remove Old Wheel Cylinder:** Remove the mounting bolts that secure the wheel cylinder to the backing plate. Remove the old wheel cylinder.
6. **Install New Wheel Cylinder:** Position the new Dorman W45872 wheel cylinder onto the backing plate. Secure it with the mounting bolts, tightening them to the manufacturer's specified torque.
7. **Connect Brake Line:** Carefully thread the brake line into the new wheel cylinder by hand to prevent cross-threading. Tighten with a line wrench, but do not overtighten.
8. **Reassemble Brake Shoes:** Reattach the brake shoes and all associated springs, clips, and retainers to the new wheel cylinder and backing plate. Ensure all components are correctly seated.
9. **Bleed the Brake System:** This is a critical step. Refill the master cylinder with new brake fluid. Bleed the brake system to remove all air from the lines. Start with the wheel cylinder furthest from the master cylinder and work your way closer. Follow the vehicle manufacturer's bleeding procedure.
10. **Reinstall Drum and Wheel:** Reinstall the brake drum and then the wheel. Lower the vehicle and tighten

the lug nuts to the manufacturer's specified torque.

11. **Test Brakes:** Before driving, pump the brake pedal several times until a firm pedal is achieved. Test the brakes at low speed in a safe area to ensure proper function. Check for any leaks.



Figure 2: Side view of the Dorman W45872 Drum Brake Wheel Cylinder, highlighting the rubber boots that protect the internal pistons from contaminants.

3. FUNCTION AND OPERATION

The drum brake wheel cylinder is a hydraulic component that plays a vital role in the vehicle's braking system. When the brake pedal is pressed, hydraulic pressure from the master cylinder is transmitted through the brake lines to the wheel cylinders. Inside the wheel cylinder, this hydraulic pressure forces two pistons outward. These pistons, in turn, push the brake shoes against the inner surface of the brake drum. The friction generated slows or stops the wheel.

The Dorman W45872 is designed to provide reliable and consistent hydraulic force, ensuring effective braking performance for the front passenger side drum brake assembly.



Figure 3: Top view of the Dorman W45872 Drum Brake Wheel Cylinder, showing the overall compact design and robust construction.

4. MAINTENANCE

Regular inspection of your vehicle's brake system is essential for safety. While the wheel cylinder itself is a sealed unit, its performance is affected by the overall condition of the brake system.

- **Brake Fluid:** Check brake fluid level regularly and ensure it is clean. Contaminated or low brake fluid can lead to brake system failure. Replace brake fluid according to your vehicle manufacturer's recommendations.
- **Leak Inspection:** Periodically inspect the wheel cylinders for any signs of brake fluid leaks, especially around the rubber boots. Leaks indicate a failing seal and require immediate attention.
- **Brake Shoe Wear:** Ensure brake shoes are not excessively worn, as this can put undue stress on the wheel cylinder.
- **Drum Condition:** Inspect brake drums for excessive wear, scoring, or cracks.

5. TROUBLESHOOTING

If you experience issues with your drum brake system after installing the wheel cylinder, consider the following common problems and solutions:

Problem	Possible Cause	Solution
Soft or Spongy Brake Pedal	Air in the brake lines	Re-bleed the entire brake system thoroughly.
Brake Fluid Leak at Wheel Cylinder	Improper installation, damaged seals, or faulty component	Inspect installation, check for damage. If new, ensure proper fitment. If problem persists, replace cylinder.

Problem	Possible Cause	Solution
Brakes Dragging or Sticking	Incorrect brake shoe adjustment, seized piston in wheel cylinder, or contaminated brake fluid	Check brake shoe adjustment. Inspect wheel cylinder for free movement. Flush and replace brake fluid.
Uneven Braking	Air in one side of the system, faulty wheel cylinder, or uneven brake shoe wear	Bleed brakes. Inspect both wheel cylinders and brake shoes for proper function and wear.

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

6. SPECIFICATIONS

Specification	Detail
Brand	Dorman
Model Number	W45872
Item Weight	1.6 ounces
Product Dimensions	0.7 x 0.4 x 0.5 inches
Exterior Finish	Machined
OEM Part Numbers	134.62024; 135.62024; 33438; 84-36024; 84-50024; F45872; W-82024; W906209; WC253080; WC37023; WC45872; 5462964
Compatibility	Select Buick, Chevrolet, Oldsmobile Models (Refer to product description for specific years/models)

7. WARRANTY AND SUPPORT

Dorman products are designed for quality and reliability. For specific warranty information or technical support regarding your Dorman W45872 Drum Brake Wheel Cylinder, please refer to the official Dorman website or contact Dorman customer service directly. Keep your purchase receipt for warranty claims.

Dorman Customer Service: www.dormanproducts.com