

Dorman 600-203

Dorman 600-203 Locking Hub Instruction Manual

Model: 600-203

1. INTRODUCTION

This manual provides instructions for the installation, operation, and maintenance of the Dorman 600-203 Locking Hub. This component is designed as a direct replacement for original equipment locking hubs on specific Ford and Lincoln models, restoring four-wheel drive functionality.

2. SAFETY INFORMATION

Always follow vehicle manufacturer's service procedures and safety guidelines when working on your vehicle. Wear appropriate personal protective equipment, including safety glasses and gloves. Ensure the vehicle is securely supported on jack stands before beginning any work. Disconnect the battery's negative terminal before working on electrical components.

3. VEHICLE COMPATIBILITY

The Dorman 600-203 Locking Hub is compatible with the following vehicles. Always verify fitment using your vehicle's make, model, and trim level before installation.

- **Ford Excursion:** 2000, 2001, 2002, 2003, 2004, 2005
- **Ford Expedition:** 2001, 2002
- **Ford F-250 Super Duty:** 1999, 2000, 2001, 2002, 2003, 2004
- **Ford F-350 Super Duty:** 1999, 2000, 2001, 2002, 2003, 2004
- **Ford F-450 Super Duty:** 1999, 2000, 2001, 2002, 2003, 2004
- **Ford F-550 Super Duty:** 1999, 2000, 2001, 2002, 2003, 2004
- **Lincoln Navigator:** 2001, 2002

4. PARTS INCLUDED

The Dorman 600-203 Locking Hub package typically includes:

- One (1) Dorman 600-203 4WD Auto Locking Hub

5. INSTALLATION INSTRUCTIONS

This locking hub is designed for direct replacement. Installation typically involves removing the old hub and installing the new one. Consult your vehicle's service manual for detailed, model-specific instructions.

1. **Prepare the Vehicle:** Safely lift and support the vehicle using a jack and jack stands. Remove the wheel and tire assembly from the side where the hub will be replaced.
2. **Remove the Existing Locking Hub:** Follow your vehicle's service manual for specific removal procedures. This usually involves removing retaining clips, bolts, or other fasteners that secure the hub to the spindle.
3. **Inspect the Axle Splines:** Ensure the axle splines and the mating surface on the spindle are clean and free of debris, rust, or damage. If necessary, apply a very small amount of appropriate grease to the splines to aid installation and prevent corrosion, but avoid excessive application to prevent internal grime buildup.
4. **Install the Dorman 600-203 Locking Hub:** Carefully slide the new hub into position, ensuring the splines align correctly. Push firmly until the hub seats fully against the spindle. Secure it with the appropriate retaining clips, bolts, or other fasteners as per vehicle specifications.
5. **Test Functionality:** Before reassembling, manually test the locking hub's operation by rotating the outer ring between the "LOCK" and "AUTO" positions. Ensure smooth movement and proper engagement.
6. **Reassemble:** Reinstall the wheel and tire assembly. Torque lug nuts to vehicle manufacturer specifications. Lower the vehicle.



Image 1: Dorman 600-203 Locking Hub, top view showing LOCK and AUTO settings. This image displays the top of the Dorman 600-203 locking hub, highlighting the "LOCK" and "AUTO" positions with directional arrows. The central mechanism for engagement is visible.



Image 2: Dorman 600-203 Locking Hub, side view showing splines. This image shows a side view of the Dorman 600-203 locking hub, revealing the splined gear mechanism at the base and the main body of the hub. A green retaining clip is also visible.

6. OPERATING INSTRUCTIONS

The Dorman 600-203 Locking Hub features both "LOCK" and "AUTO" settings, allowing for flexible four-wheel drive engagement.

- **AUTO Mode:** In this setting, the hub is designed to engage automatically when 4WD is selected from inside the vehicle. This allows for "shift-on-the-fly" 4WD engagement, typically at lower speeds.
- **LOCK Mode:** In this setting, the hub is manually locked, providing constant engagement of the front axles to the wheels. This mode ensures consistent 4WD operation in demanding conditions or when the "AUTO" function is unreliable. It requires manually turning the hub to the "LOCK" position.

To switch between modes, rotate the outer ring of the hub to align the indicator with the desired setting (LOCK or AUTO). Ensure the hub clicks securely into place for the selected mode.

7. MAINTENANCE

Proper maintenance can extend the life and ensure reliable operation of your Dorman 600-203 Locking Hub.

- **Regular Inspection:** Periodically inspect the locking hubs for any signs of damage, excessive wear, or corrosion. Check for loose components or unusual noises during operation.
- **Lubrication:** While the unit comes pre-lubricated, some users find it beneficial to disassemble and apply a good quality, water-resistant grease to the internal components for extended life, especially if operating in harsh or wet conditions. Use sparingly to avoid attracting dirt and grime.
- **Prevent Seizing:** If the hubs are not regularly used, manually turn them back and forth between the LOCK and AUTO settings periodically (e.g., once a month) to prevent them from seizing up, particularly in cold weather or after prolonged disuse.

8. TROUBLESHOOTING COMMON ISSUES

- **Hub does not fully seat during installation:**
Ensure all old components, rust, and debris are thoroughly removed from the spindle and hub assembly area. Verify that the correct part number is being used for your specific vehicle. Check for any physical obstructions preventing full seating.
- **Intermittent AUTO lock engagement:**
This issue can sometimes be attributed to the vehicle's vacuum system, electrical connections, or other 4WD engagement components, rather than the hub itself. Test the "LOCK" mode to confirm the hub's mechanical integrity. If "LOCK" mode works reliably, further investigation into the vehicle's automatic 4WD system may be required.
- **Hubs seizing or difficult to turn:**
Lack of regular use or insufficient lubrication can cause the internal mechanisms to seize. Refer to the Maintenance section for prevention tips, including periodic manual engagement and potential re-lubrication.
- **4WD not engaging:**
If the hub is correctly installed and set to "LOCK" or "AUTO" but 4WD still does not engage, inspect other components of the 4WD system, such as the transfer case, vacuum lines, electrical actuators, and front differential.

9. PRODUCT SPECIFICATIONS

Property	Value
Brand	Dorman
Model	600-203
Item Weight	2.5 pounds
Product Dimensions	11 x 5 x 3.15 inches
Manufacturer Part Number	600-203
OEM Part Numbers	L30002; SK600203; 1C3Z-3B396-CB

Property	Value
Position	Front, Rear
Exterior Finish	Painted

10. WARRANTY AND SUPPORT

For specific warranty information, technical assistance, or to inquire about other Dorman products, please contact Dorman Products directly.

You can find more information and contact details on the official Dorman website or their Amazon Brand Store: [Dorman Brand Store](#).