SHIMANO EBBUN300B22X

Shimano Square Type Bicycle Bottom Bracket

Model: EBBUN300B22X

1. Product Overview

The Shimano BB-UN300 is a standard square type bicycle bottom bracket designed for reliable performance. It features high-quality cartridge bearings for smooth operation and a chain line stabilizer for improved chainline consistency. This model is part of the Shimano Tourney TX800 Series and is compatible with JIS square-taper cranksets. It incorporates a hollow spindle and an aluminum adapter material for durability and weight efficiency.

Key Features:

- SHIMANO quality/performance cartridge bearing square bottom bracket
- Better chainline stability with chain line stabilizer
- Fits JIS square-taper cranksets
- Adapter material: Aluminum
- Hollow spindle design



Image 1: Front view of the Shimano Square Type Bottom Bracket.

2. Compatibility

This bottom bracket is compatible with bicycle frames featuring BSA (British Standard Association) threaded bottom bracket shells. It supports both 68mm and 73mm shell widths, and is designed for JIS square-taper cranksets. Various spindle lengths are available to match specific crankset and frame requirements.

Supported Shell Widths and Spindle Lengths:

- 68mm BSA shell with spindle lengths: 107mm, 110mm, 113mm, 117.5mm, 118mm (XL), 122.5mm (D-NL), 122.5mm (LL123)
- 73mm BSA shell with spindle lengths: 113mm, 118mm (XL), 122.5mm (LL123)

Note: Crank fixing bolts are sold separately and are not included with the bottom bracket unit.

3. Safety Information

Always wear appropriate safety gear, such as gloves and eye protection, when performing bicycle maintenance. Ensure your bicycle is securely supported in a work stand. Use only the correct tools for installation and removal to prevent damage to the component or injury. If you are unsure about any installation steps, consult a professional bicycle mechanic.

4. Tools Required

For proper installation and removal of the bottom bracket, the following tools are typically required:

- Bottom Bracket Tool (compatible with Shimano cartridge bottom brackets)
- Crank Puller (for square taper cranksets)
- Torque Wrench
- Grease (bicycle specific)
- Clean Rags

5. Setup (Installation)

Follow these general steps for installing the Shimano Square Type Bottom Bracket. Refer to a detailed bicycle repair guide or professional mechanic if needed.

1. **Preparation:** Remove the existing crankset and old bottom bracket from the bicycle frame. Thoroughly clean the bottom bracket shell threads to remove any dirt, old grease, or debris.
2. **Greasing Threads:** Apply a thin, even layer of bicycle-specific grease to the threads inside the bottom bracket shell and on the bottom bracket cups. This prevents seizing and facilitates future removal.
3. **Install Drive Side:** Identify the drive-side cup (typically marked with an 'R' or right-hand thread). Thread it into the drive side of the bottom bracket shell by hand, ensuring it starts smoothly without cross-threading.
4. **Install Non-Drive Side:** Thread the non-drive side cup (typically marked with an 'L' or left-hand thread) into the non-drive side of the bottom bracket shell by hand.
5. **Tighten Bottom Bracket:** Use the appropriate bottom bracket tool and a torque wrench to tighten both cups to the manufacturer's specified torque. Typically, this is around 50-70 Nm (36-51 ft-lbs). Refer to Shimano's official documentation for precise torque specifications.
6. **Install Crankset:** Slide the drive-side crank arm onto the square taper spindle, ensuring it is fully seated. Repeat for the non-drive side crank arm.
7. **Tighten Crank Bolts:** Install and tighten the crank fixing bolts (sold separately) to the manufacturer's specified torque, typically around 35-45 Nm (25-33 ft-lbs).



Image 2: Side view of the Shimano Square Type Bottom Bracket, showing the spindle and cups.

6. Operating

Once correctly installed, the bottom bracket allows the bicycle's crankset to rotate freely and smoothly, transferring power from the pedals to the drivetrain. Proper installation ensures efficient pedaling and minimizes friction.

7. Maintenance

Regular maintenance helps prolong the life and performance of your bottom bracket:

- **Cleaning:** Periodically clean the exterior of the bottom bracket and surrounding areas to prevent dirt and grime buildup.
- **Check for Play:** Regularly check for any lateral play (side-to-side movement) in the crank arms. If play is detected, ensure crank bolts are tightened to specification. If play persists, the bottom bracket may need inspection or replacement.
- **Re-greasing:** If the bottom bracket is removed for any reason, always clean and re-grease the threads before reinstallation.
- **Avoid High-Pressure Washing:** Directing high-pressure water sprays directly at the bottom bracket area can force water past the seals, potentially contaminating the bearings.

8. Troubleshooting

Common issues and their potential solutions:

- **Creaking Noise:**
    - Check if the bottom bracket cups are tightened to the correct torque.
    - Ensure crank bolts are tightened to specification.
    - Remove, clean, re-grease, and reinstall the bottom bracket.

- Inspect for worn bearings or damaged threads.

- **Stiff Pedaling:**
  - Verify that the bottom bracket was not overtightened during installation.
  - Check for any foreign objects or debris obstructing the rotation.
  - Bearings may be worn or contaminated, requiring replacement.

- **Crank Arm Play:**
  - Ensure crank bolts are securely tightened.
  - Inspect the square taper interface on both the crank arms and the bottom bracket spindle for wear or damage.
  - If play persists after checking bolts and interfaces, the bottom bracket may be worn and require replacement.

9. Specifications

Brand	SHIMANO
Model Name	BB-UN300 (EBBUN300B22X for 68mm BSA, 122.5mm Spindle)
Type	Standard Square Type Cartridge Bottom Bracket
Spindle Material	Steel
Adapter Material	Aluminum
Shell Material	Steel
Shell Width Compatibility	68mm, 73mm (BSA/JIS/BC1.37 Threading)
Spindle Lengths Available	107mm, 110mm, 113mm, 117.5mm, 118mm (XL), 122.5mm (D-NL), 122.5mm (LL123)
Color	Black
Unit Count	1.0 Count
Package Weight	0.3 Kilograms
UPC	192790619156
Included Components	Bottom Bracket Unit (Crank fixing bolts sold separately)

10. Warranty Information

This Shimano product is covered by a Limited Warranty. For specific details regarding the terms, conditions, and duration of the warranty, please refer to the official warranty documentation provided by Shimano or visit the official Shimano website. Keep your proof of purchase for warranty claims.

11. Support

For technical assistance, installation queries, or warranty support, please contact Shimano customer service or an authorized Shimano dealer. You can find contact information and additional resources on the official Shimano website.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question