

SHIMANO SG-3C41

SHIMANO Nexus Inter-3 SG-3C41 Push Rod for 168mm Axle Instruction Manual

Model: SG-3C41 (Part Number: Y33S91100)

INTRODUCTION

This manual provides essential information for the proper installation, function, and maintenance of the SHIMANO Nexus Inter-3 SG-3C41 Push Rod, designed specifically for Nexus Inter-3 hubs with a 168mm axle length. This component is crucial for the internal gear shifting mechanism of your bicycle's hub.



Image: The SHIMANO Nexus Inter-3 SG-3C41 Push Rod. This slender metal rod is a critical internal component for the hub's gear shifting.

SETUP AND INSTALLATION

The SHIMANO Nexus Inter-3 SG-3C41 Push Rod is a replacement part for the internal gear hub. Correct identification of your hub's axle length is critical for proper function.

1. Verify Compatibility

- This push rod (approximately 82mm in length) is specifically designed for SHIMANO Nexus Inter-3 hubs with an overall axle length of **168mm**.
- *Important:* Do not use this push rod with Nexus 3-speed hubs that have a 172mm overall axle length, as they require an 87mm push rod. Using the incorrect length will prevent proper gear shifting.

2. Installation Procedure

Installation typically involves inserting the push rod into the axle of the Nexus Inter-3 hub. This process usually occurs during the assembly or repair of the hub's internal shifting mechanism.

1. Ensure the hub is clean and free of debris.

2. Carefully insert the push rod into the designated channel within the hub axle.
3. Confirm that the push rod is fully seated and moves freely within its channel.
4. Proceed with the reassembly of the hub's shifting mechanism and external components according to the specific SHIMANO Nexus Inter-3 hub service instructions.

Note: Refer to the comprehensive service manual for your specific SHIMANO Nexus Inter-3 hub model for detailed, step-by-step installation instructions, as hub disassembly and reassembly require specialized knowledge and tools.

OPERATING PRINCIPLE

The push rod is an integral part of the SHIMANO Nexus Inter-3 internal gear hub's shifting mechanism. When the shifter lever is actuated, it pulls or releases a cable, which in turn moves the push rod within the hub axle. This movement engages different planetary gear sets inside the hub, allowing the rider to select between the three available gears. The push rod's precise length ensures correct engagement and disengagement of these gears.

MAINTENANCE

The SHIMANO Nexus Inter-3 SG-3C41 Push Rod itself requires no direct maintenance. Its function is passive within the sealed environment of the hub. However, proper maintenance of the entire Nexus Inter-3 hub system is essential for the longevity and smooth operation of the push rod and gears.

- **Hub Lubrication:** Follow SHIMANO's recommendations for periodic lubrication of the Nexus Inter-3 hub. This typically involves oiling or greasing the internal components to ensure smooth shifting and prevent wear.
- **Cable Maintenance:** Ensure the shifter cable is clean, lubricated, and free from kinks or corrosion. A well-maintained cable ensures the push rod moves correctly.
- **Regular Inspection:** If the hub is disassembled for any reason, inspect the push rod for any signs of bending, corrosion, or damage. Replace if necessary.

TROUBLESHOOTING

If you experience shifting issues with your SHIMANO Nexus Inter-3 hub, the push rod may be a contributing factor. Consider the following:

- **Incorrect Gear Engagement:** If gears are difficult to select or do not engage properly, verify that the correct push rod length (82mm for 168mm axle) is installed. An incorrect push rod length is a common cause of shifting problems.
- **Bent or Damaged Push Rod:** A bent or damaged push rod can impede its movement within the axle, leading to poor shifting performance or complete failure to shift. Inspect the rod if the hub has been subjected to impact or improper assembly.
- **Cable Tension:** Ensure the shifter cable tension is correctly adjusted according to SHIMANO's specifications for the Nexus Inter-3 hub. Incorrect tension can mimic push rod issues.
- **Internal Hub Issues:** If the push rod is confirmed to be correct and undamaged, and cable tension is accurate, the issue may lie with other internal components of the hub, requiring professional service.

SPECIFICATIONS

Feature	Detail
Brand Name	SHIMANO
Model Name	Push Rods

Feature	Detail
Part Number	Y33S91100
Compatibility	Nexus Inter-3 SG-3C41 Hubs with 168mm Axle Length
Approximate Length	82mm (for 168mm axle)
Material	Metal, Steel, Aluminium
Color	Silver
Item Dimensions (LxWxH)	3.1 x 0.1 x 0.1 inches
Item Weight	0.05 Pounds
Included Components	Internally Geared Hub Part (Push Rod Only)

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 SHIMANO warranty documentation provided with your original product purchase or visit the official SHIMANO website. The warranty typically covers manufacturing defects under normal use.

SUPPORT AND CONTACT

For further assistance, technical support, or inquiries regarding the SHIMANO Nexus Inter-3 SG-3C41 Push Rod or other SHIMANO products, please contact SHIMANO customer service or visit their official website.

- **Official SHIMANO Website:** bike.shimano.com (Please note: This link is for general informational purposes and may not lead directly to support for this specific part.)
- **Authorized Dealers:** For professional installation or repair, consult an authorized SHIMANO dealer or bicycle mechanic.