SHIMANO ST-A070

Shimano ST-A070 Tourney 2x7 Speed Road Bike Shifters Instruction Manual

Model: ST-A070

1. Introduction

This instruction manual provides essential information for the proper installation, operation, and maintenance of your Shimano ST-A070 Tourney 2x7 Speed Road Bike Shifters. Please read this manual thoroughly before using the product to ensure safe and correct usage. Retain this manual for future reference.

2. Safety Information

Always prioritize safety when working with bicycle components. Improper installation or adjustment can lead to serious injury or damage to your bicycle.

- **Professional Installation Recommended:** If you are unsure about any installation steps, it is highly recommended to have the shifters installed by a qualified bicycle mechanic.
- **Use Correct Tools:** Always use the appropriate tools for installation and adjustment.
- **Check Compatibility:** Ensure these shifters are compatible with your bicycle's drivetrain (2x7 speed, double crankset) and brake system (Short Pull Super SLR).
- **Test Functionality:** After installation, thoroughly test the shifting and braking functions before riding.
- **Wear Safety Gear:** Always wear appropriate safety gear, including a helmet, when riding your bicycle.

3. Package Contents

Verify that all components are present in your package:

- Shimano ST-A070 Left Shifter (2-speed)
- Shimano ST-A070 Right Shifter (7-speed)
- Shift Cables

- Brake Cables
- Cable Housing
- Installation Hardware



Figure 3.1: Shimano ST-A070 Shifters with included cables and housing.

4. Setup and Installation

This section outlines the general steps for installing the ST-A070 shifters. Specific details may vary based on your bicycle frame and existing components. Refer to detailed Shimano technical documents for precise cable routing and adjustment procedures.

4.1 Tools Required

- Hex wrenches (various sizes)
- Cable cutters
- Cable crimps
- Grease
- Torque wrench (recommended)

4.2 Mounting the Shifters

1. Loosen the clamp bolt on each shifter.
2. Slide the shifters onto the handlebars to your desired position. Ensure comfortable reach to both brake and shift levers.
3. Tighten the clamp bolts securely. Refer to manufacturer's torque specifications if available.

4.3 Installing Shift Cables

1. Shift the lever to the highest gear position (smallest sprocket for rear, largest chainring for front).
2. Locate the cable insertion port on the shifter. Insert the shift cable head into the lever mechanism.
3. Route the shift cable through the appropriate cable housing and along the bicycle frame to the front and rear derailleurs. Ensure smooth, unrestricted cable paths.
4. Attach the cable to the derailleur and adjust tension.

4.4 Installing Brake Cables

1. Locate the brake cable insertion port on the shifter. Insert the brake cable head into the lever mechanism.
2. Route the brake cable through the appropriate cable housing and along the bicycle frame to the front and rear brake calipers.
3. Attach the cable to the brake caliper and adjust tension. Ensure proper brake lever feel and engagement.



Figure 4.1: Detail of the ST-A070 shifter, showing the thumb button for shifting to smaller sprockets.

5. Operating Instructions

The Shimano ST-A070 shifters provide intuitive control over your bicycle's 2x7 speed drivetrain and braking system.

5.1 Shifting Gears

- **Upshifting (to larger sprockets/chainrings):** Push the main brake lever inwards towards the handlebar. This action will shift the chain to a larger sprocket on the rear derailleur or a larger chainring on the front derailleur.
- **Downshifting (to smaller sprockets/chainrings):** Use the dedicated thumb button located on the inside of the shifter body. Pressing this button will shift the chain to a smaller sprocket on the rear derailleur or a smaller chainring on the front derailleur.
- **Gear Indicator:** The integrated gear indicator provides a visual reference of your current gear selection.

5.2 Braking

Pull the main lever towards the handlebar to engage the brakes. The ST-A070 shifters feature a Short Pull Super SLR brake lever action, designed for efficient braking performance with compatible caliper brakes.

6. Maintenance

Regular maintenance ensures optimal performance and extends the lifespan of your shifters.

- **Cleaning:** Keep the shifters clean from dirt and debris. Use a damp cloth to wipe down the exterior.
- **Cable Lubrication:** Periodically lubricate shift and brake cables to ensure smooth operation. Apply a light lubricant to exposed cable sections and where cables enter housing.
- **Cable and Housing Inspection:** Regularly inspect cables and housing for fraying, kinks, or damage. Replace worn cables and housing promptly.
- **Lever Pivot Points:** Apply a small amount of grease to the pivot points of the levers to maintain smooth movement.
- **Bolt Tightness:** Periodically check that all mounting bolts are securely tightened.

7. Troubleshooting

Below are common issues and their potential solutions.

7.1 Shifting Problems

- **Difficulty Shifting:** Check cable tension. If too loose, the derailleur may not move enough. If too tight, it may overshift. Adjust the barrel adjusters on the shifter or derailleur.
- **Ghost Shifting or Poor Indexing:** This can be caused by stretched cables, worn housing, or improper derailleur limit screw settings. Inspect cables and housing, and adjust limit screws as per derailleur manufacturer instructions.
- **Stiff Shifter Action:** Lubricate cables and pivot points. Check for kinks in cable housing.

7.2 Braking Problems

- **Weak Braking:** Check brake cable tension. Ensure brake pads are properly aligned and not worn out. Clean rim braking surfaces.
- **Spongy Brake Lever:** This often indicates too much slack in the brake cable or air in hydraulic systems (not applicable to these mechanical shifters). Adjust cable tension.
- **Brakes Rubbing:** Ensure brake calipers are centered and brake pads are not contacting the rim when the lever is released.

If problems persist, consult a professional bicycle mechanic.

8. Specifications

Feature	Specification
Model Number	ST-A070
Speed Ratios	2 x 7 Speed
Crankset Compatibility	Double
Brake Lever Action	Short Pull Super SLR
Material	Aluminum (Lever)
Included Components	Left and Right Shifters, Shift Cables, Brake Cables, Cable Housing, Hardware
Approximate Dimensions (L x W)	11" x 9.5"
Approximate Item Weight	3.2 ounces
Manufacturer Part Number	STA070PA
UPC	689228513297

9. Warranty Information

This Shimano product is covered by a Limited Warranty. For specific terms, conditions, and duration of the warranty, please refer to the official Shimano warranty documentation provided with your purchase or visit the official Shimano website. The warranty typically covers defects in materials and workmanship under normal use.

10. Support

For technical assistance, replacement parts, or further inquiries regarding your Shimano ST-A070 Tourney shifters, please contact your local authorized Shimano dealer or visit the official Shimano support website. Professional bicycle mechanics are also an excellent resource for installation and maintenance advice.

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