

# SERVICE INSTRUCTION

## Shimano 105 Caliper Brake

- Caliper Brake  
BR-1050-49 (49-type)  
BR-1050-57 (57-type)
- Brake Lever  
BL-1050  
BL-1051 (aero type)

NEW  
**SHIMANO  
105**

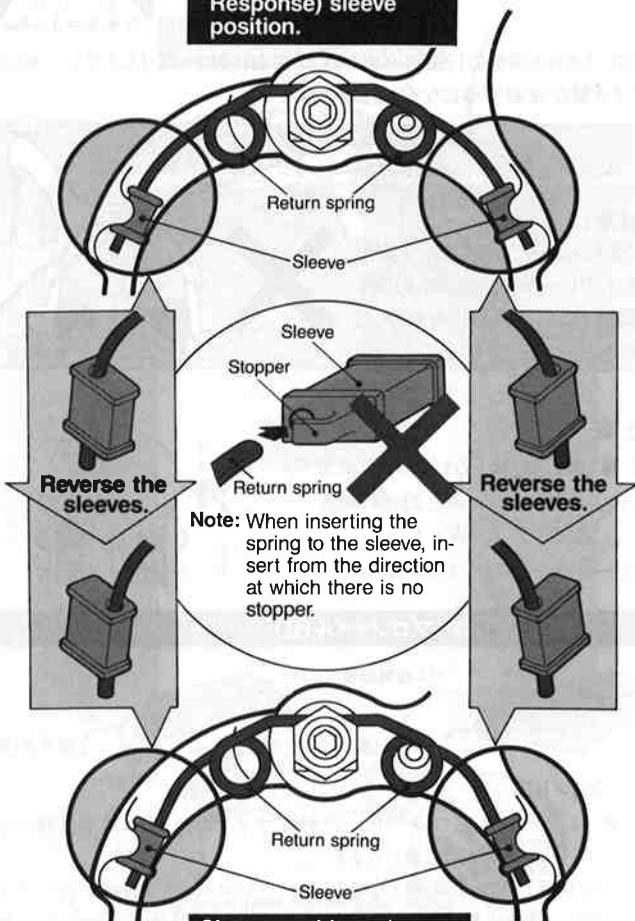


Before use, read these instructions carefully, and follow them for correct use.

### NOTE

- Be sure to use the Shimano 105 brake (BR-1050) as a set together with a 105 series brake lever (BL-1050 or BL-1051) and the Shimano outer cable casing with liner. The spring force is set for SLR (Shimano Linear Response).
- If it is used with some other brake lever and/or outer cable, increase the brake's spring force as described below.

**SLR (Shimano Linear Response) sleeve position.**



**Sleeve position when combined with other brake lever and/or outer cable.**

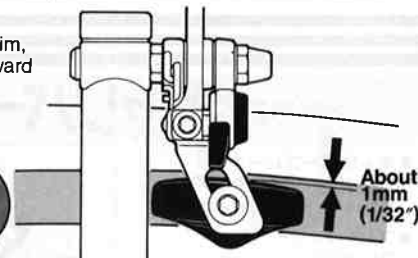
Note: When reversing the sleeves, be sure to reverse both the left and right.

- Keep the brake shoes and rims free from oil and grease. If they are stained with oil or grease, wipe them clean with alcohol.
- If the brake does not function well, check the brake shoe clearance and the cable routing.

## Assembling the Caliper Brake

- **Brake shoe setting position**  
Align the brake shoe with the rim, and then set to about 1mm inward from the edge of the rim.

Shoe fixing bolt  
tightening torque:  
50—70 kgfcm  
(43—60 in. lbs.)

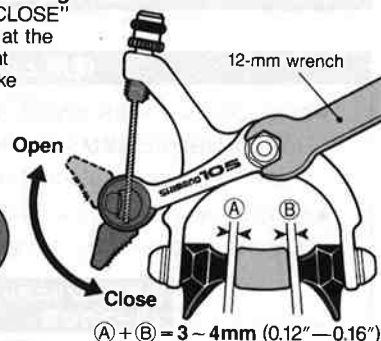


Be sure to place the brake shoe so that the direction of the grooves is opposite the direction of rim rotation.

Direction of grooves  
Rim rotation direction

- **Cable securing and brake shoe centering**  
Set the quick-release lever to the "CLOSE" position, and then secure the cable at the position where the total left and right clearance between the rim and brake shoes is 3 to 4mm.

Cable fixing bolt  
tightening torque:  
65—80 kgfcm  
(57—70 in. lbs.)

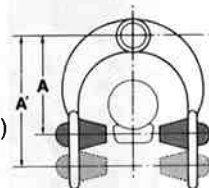


Using a 12-mm wrench at the head of the pivot bolt, move it to the left and right, and adjust so that the clearance between the rim and brake shoe is uniform at the left and right.

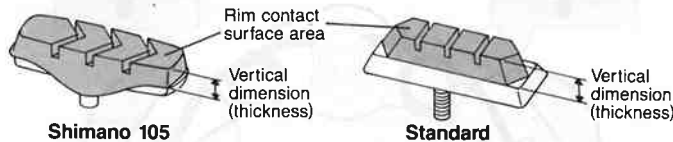
Note: Never try to adjust the clearance between the brake shoe and the rim by modifying the return spring.

### Specifications

- Weight: Front 170g/Rear 165g (Sunken pivot bolt 49-Type)
- Size: 49-Type A—A' = 39—49mm (1-17/32"—1-15/16")  
57-Type A—A' = 47—57mm (1-7/8"—2-1/4")
- Brake shoe: Low-profile 60



### Low-profile 60 (brake shoe)



- "Profile" is the ratio of the shoe's vertical dimension (thickness) and the rim contact surface area, and is expressed as: (vertical dimension ÷ surface area) × 100. Compared to a standard 70—75 value, the Shimano 105 has a low profile of 60. This low profile means that there is little deflection, and the contact surface area is larger.
- The shoe can be used until the grooves disappear.
- The groove depth is the same as for a standard brake shoe.

Please note: specifications are subject to change for improvement without notice, (English)

SHIMANO SALES CORPORATION  
9530 Cotycroft Avenue, Chatsworth, California 91311 Tel. (818) 882-4411  
SHIMANO AMERICAN CORPORATION  
205 Jefferson Road, Parsippany, New Jersey 07054 U.S.A. Tel. (201) 884-2300  
SHIMANO (EUROPE) GmbH  
Im Hülshof 13 4010 Hülstern, West Germany Tel. 02103 5005 0

SHIMANO (SINGAPORE) PTE. LTD.  
No. 20, Benua Sector, Jurong Town, Singapore 2262 Tel. 2654777  
SHIMANO INDUSTRIAL CO. LTD.  
3-77 Omatacho, Sakai, Osaka, Japan Tel. (0722) 23-3243