

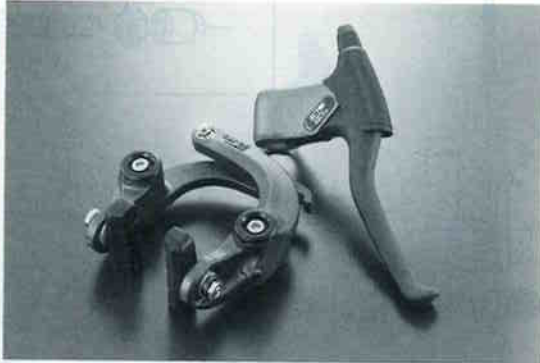
SERVICE INSTRUCTION

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

U-Brake BR-M451

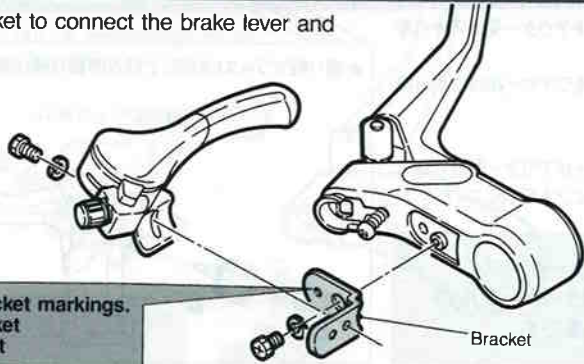
Brake Lever BL-M450 BL-M350

EXAGE



Using the Bracket

Use the bracket to connect the brake lever and shifting lever.



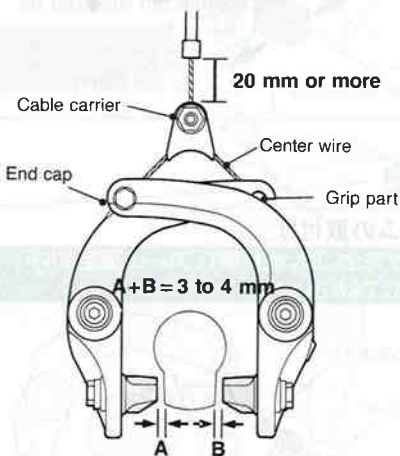
Note the bracket markings.
R: right bracket
L: left bracket

Installation of the U-brake

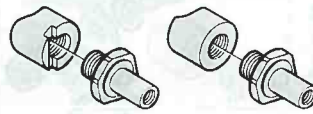
Installation of the center wire

- Install the cable carrier to the inner cable.
* The length of cable between the cable carrier and cable hanger should be 20 mm or more.
- Set the center wire as shown in the figure, align the left and right space between the brake shoes and rim equally and adjust the total space to about 3 or 4 mm, and then tighten by using the wire-holding nut.
- Cut the unnecessary center wire and install the end cap.

Tightening torque: 60—80 kgfcm (50—70 in.lbs.)

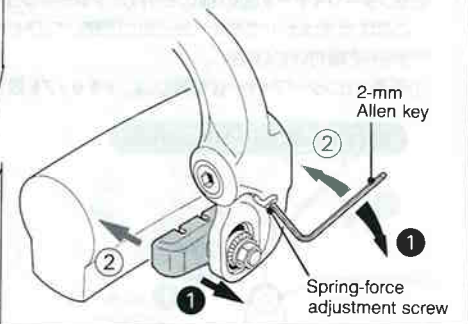


Pivot boss for light alloy frame is also available.



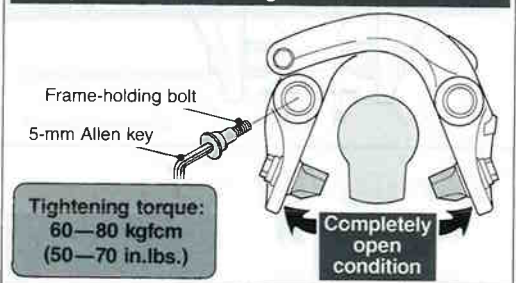
Fine adjustment of shoe clearance

The fine adjustment of the shoe clearance centering (after installation) can be made by the spring-force adjustment screw of the brake arm.



Installation to the frame

With the arm completely opened, tighten by using the frame-holding bolts.



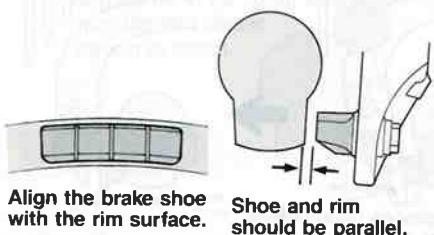
Tightening torque:
60—80 kgfcm
(50—70 in.lbs.)

Completely open condition

Adjustment and securing of the brake shoes

- With the frame holding bolt loosely tightened (so that the arm can move freely), adjust the brake shoe.
- Align the brake shoes to the rim. Then adjust so that the shoe surface and the rim surface are as shown in the figure.

- When the adjustment is completed, tighten and secure the shoe-holding nut by using a 10-mm spanner.

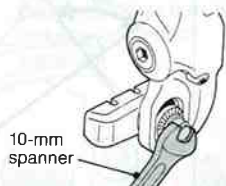


Align the brake shoe with the rim surface.

Shoe and rim should be parallel.

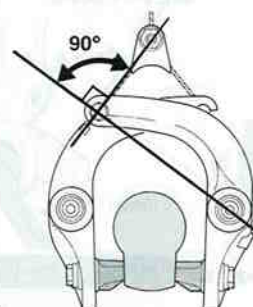


Open about 0.5—1.0 mm.

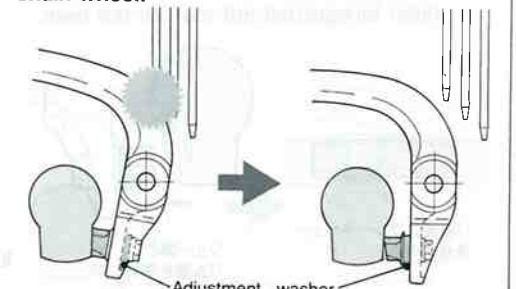


Tightening torque:
60—90 kgfcm
(50—75 in.lbs.)

This angle should be 90° when the brake shoe contacts the rim.

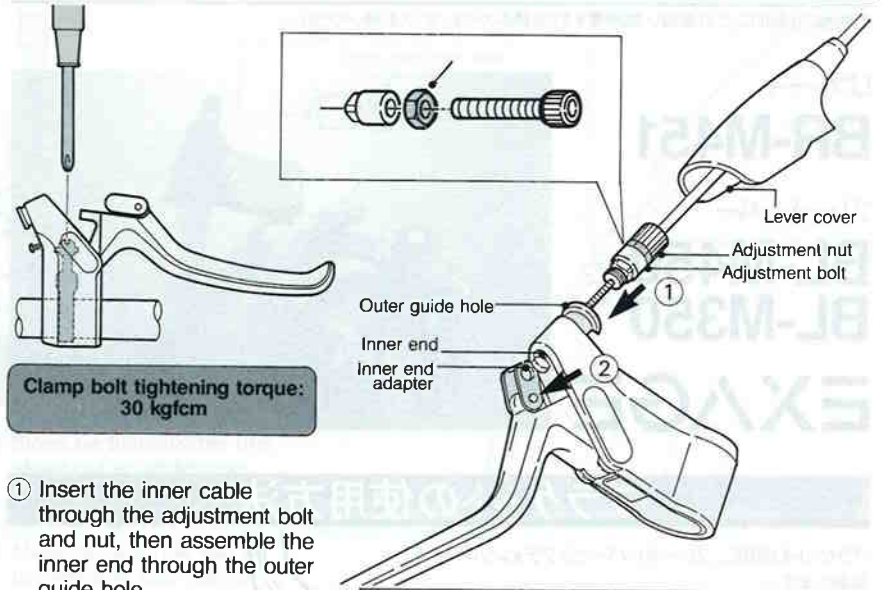


As the brake shoes wear down, the brake may contact the chain wheel. If the shoes wear down, move the adjustment washer to the inside to prevent the brake from contacting the chain wheel.



Adjustment washer

Installation of the brake lever and cable



Clamp bolt tightening torque:
30 kgfcm

- Insert the inner cable through the adjustment bolt and nut, then assemble the inner end through the outer guide hole.
- Hook the inner end on the inner end adapter.

Note: Check to be sure that the adjustment nut is securely seated in the outer guide hole.

The use of 1.6-mm inner cable and 5-mm outer casing is standard.

Turn the width adjustment bolt to the preferred brake width.

