

WARNING

It is important to completely understand the operation of your bicycle's brake system. Improper use of your bicycle's brake system may result in a loss of control or accident, which could lead to severe injury. Because each bicycle may handle differently, be sure to learn the proper braking technique (including brake lever pressure and bicycle control characteristics) and operation of your bicycle. This can be done by consulting your professional bicycle dealer and the bicycle's owners manual, and by practicing your riding and braking technique.

SERVICE INSTRUCTIONS SI-B230A

Multi-Condition Brake System

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

Multi-Condition Brake System

In providing superior wet weather braking performance (control and modulation), braking performance will not vary in a multitude of conditions when compared to previous Shimano brake systems. Optimum performance for this Multi-Condition Brake System will be achieved if these components are used as a set.

In order to realize the best performance, we recommend that the following combination be used.

Series	DEORE XT	DEORE LX	STX-RC
Brake lever	ST-M738	ST-M566 ST-M565 ST-M563	ST-MC33 ST-MC35
Cantilever brake	BR-M737	BR-M565	BR-MC33
Brake cable	M SYSTEM		

Specifications

Cantilever Brake

Model number	BR-M737	BR-M565 BR-MC33	BR-M565 BR-MC33
Arch size	M	M	L
Link type	Unit link (dynamic type)		
	A / 73	A / 73	A / 73
	B / 82	B / 82	B / 82
			C / 106
			D / 93
Link wire length			

Brake Lever

Model number	ST-M738 / ST-M566 / ST-M565 / ST-M563 / ST-MC33 / ST-MC35
Clamp diameter	22.2 mm

Note

- By using these parts as a set, the optimum efficiency of the Multi-Condition Brake System can be realized. When replacing the brake shoes and cables, use parts that are suitable for the Multi-Condition Brake System.
- If the link length is the same, any link wire can be used even if the type is different.
- For any questions regarding methods of installation, adjustment, maintenance or operation, please contact a professional bicycle dealer.

SHIMANO

These service instructions are printed on recycled paper and can be recycled again.

SHIMANO AMERICAN CORPORATION
One Shimano Drive, P.O. Box 19615, Irvine, California 92713-9615 Tel: (714) 951-5003

SHIMANO (EUROPE) GmbH
Königsplatz 1-3, D-61109 Hatten, Germany Tel: 02103 5005 0

SHIMANO INC.
77 Chitose-cho, 3-chō, Saihō, Osaka 590 Japan Tel: (0722) 23-3243

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

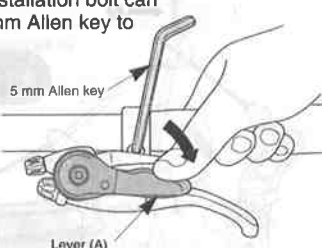
© May, 1994 by Shimano Inc. XBC IZM Printed in Japan.

Installation of the brake lever

- Move lever (A) so that the installation bolt can be seen, and then use a 5 mm Allen key to install.

Tightening torque:
5.9 - 7.8 Nm
(53 - 69 in. lbs.)

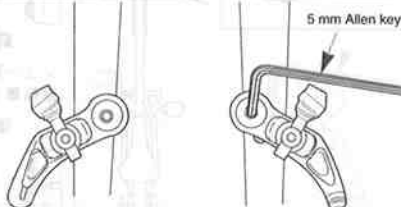
Use a handlebar grip
with a maximum outer
diameter of 32 mm.



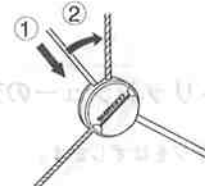
Installation of the cantilever brake

- Install the brake body to the frame.

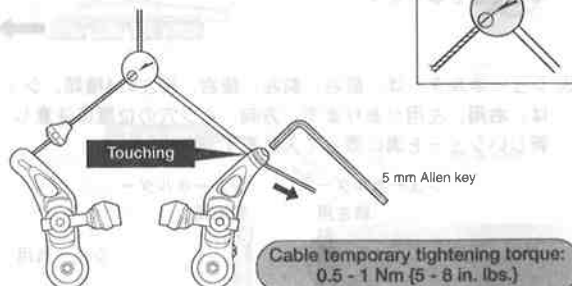
Tightening torque: 4.9 - 6.9 Nm (44 - 60 in. lbs.)



- Set the cable onto the cable carrier.

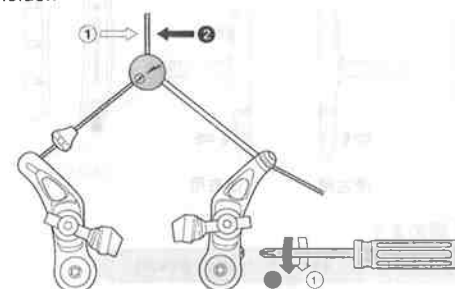


- Temporarily tighten the cable so that the cable carrier is at the position in the illustration.

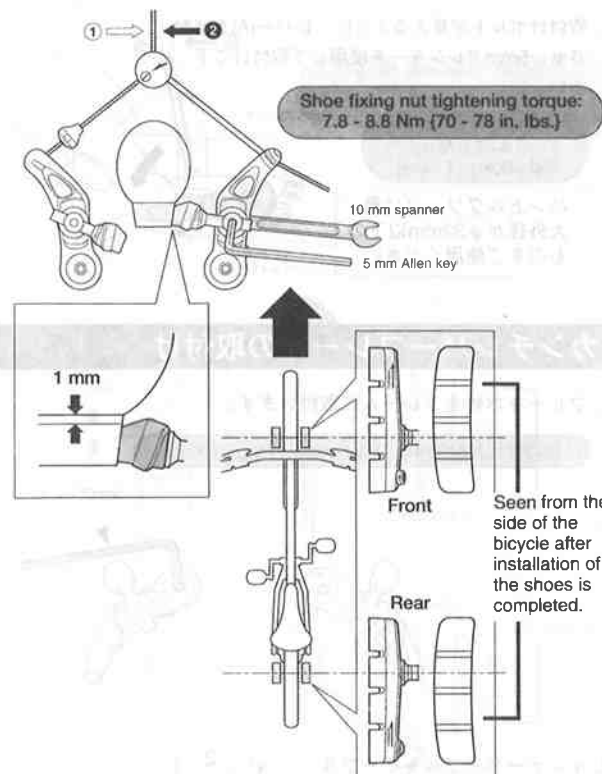


Cable temporary tightening torque:
0.5 - 1 Nm (5 - 8 in. lbs.)

- Turn the spring tension adjustment screw so that the cable carrier comes to a position directly below the outer casing holder.

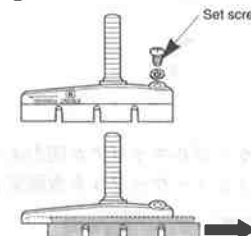


- Secure the shoes one side at a time. Shoe clearance is not necessary at this time.



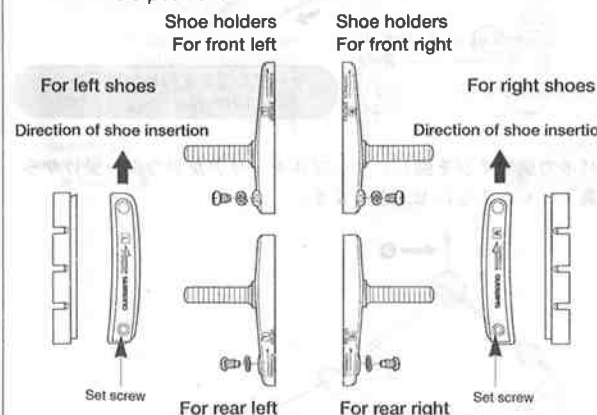
Replacement of the cartridge shoe

- Remove the set screw.



- Remove the shoe by sliding it along the groove of the shoe holder.

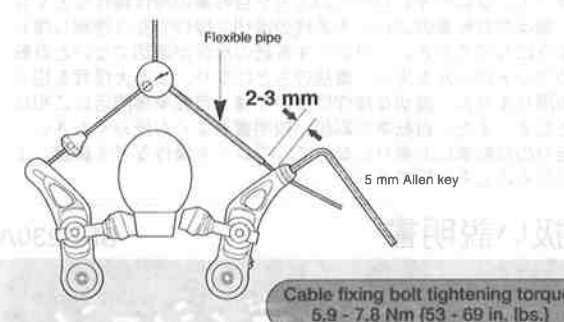
- There are four different types of shoe holders to be used in the front left, front right, rear left and rear right positions, and two different types of shoe to be used in the left and right positions respectively. Slide the new shoes into the grooves on the shoe holders while taking note of the correct directions and screw hole positions.



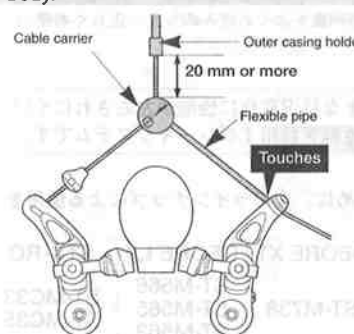
- Tighten the set screw.

Tightening torque: 0.8 - 1 Nm (7 - 9 in. lbs.)

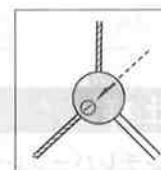
- Loosen the cable fixing bolt, move the brake body so that the clearance is 2 - 3 mm, and then secure the cable.



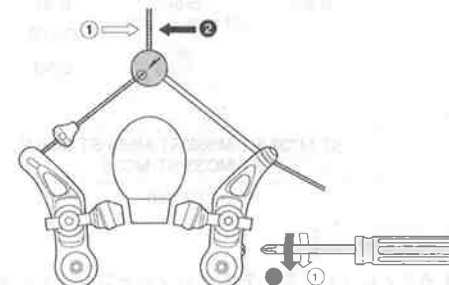
- Adjust the flexible pipe so that it touches the cantilever brake body.



- If the cable carrier is in the position in the illustration, then setting is complete. Check to be sure that there is a clearance of 20 mm or more between the outer casing holder and the cable carrier as shown in the illustration for step 7. This is to ensure that the cable carrier does not touch the outer casing holder. If it does touch, the brakes will not work.



- If balance adjustment is necessary, adjust with the spring tension adjustment screw.



Cut off any unnecessary cable, attach an end cap and hook it onto the dowel.

BR-MC33 Cut off any unnecessary cable, attach an end cap, and hook it onto the notched part of the shoe fixing nut.

