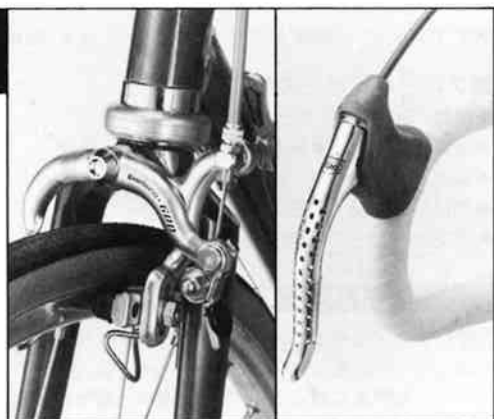


SERVICE INSTRUCTION

SHIMANO 600EX CALIPER BRAKE

- Caliper Brake (BR-6200)
- Brake Lever (BL-6200)



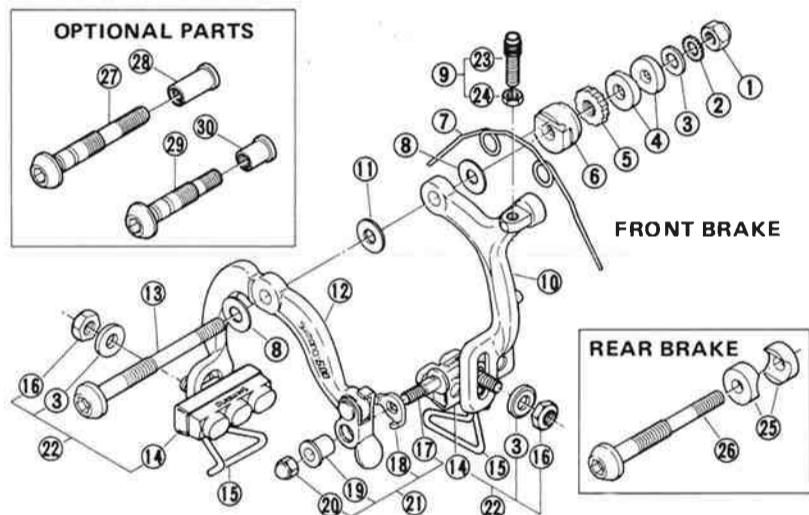
Caliper Brake Features

- 1) Improved pivot bolt system allows easier brake shoe clearance adjustment.
- 2) Wheel assembly and disassembly is much faster because of the Quick Release System and Tire Guide. Maintenance is also much faster to perform.

Brake Lever Features

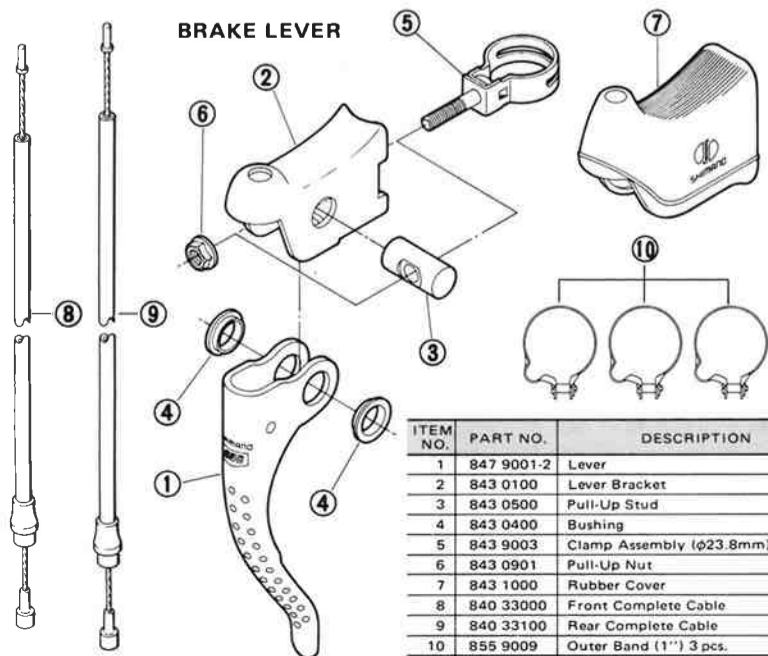
- 1) Brake cable is easy to assemble and disassemble because of the one-touch cable assembly system.
- 2) Light alloy is used as much as possible for maximum weight reduction. The surface is almite finished and the drilled out levers give the design its distinctive appearance.

Exploded View and Parts List



ITEM NO.	PART NO.	DESCRIPTION	ITEM NO.	PART NO.	DESCRIPTION
1	863 2701	Lock Nut for Pivot Bolt	16	855 1100	Shoe Fixing Nut
2	811 6101	Teethed Washer	17	857 1200	Cable Fixing Bolt
3	855 1000	Washer	18	857 1100	Cable Fixing Washer
4	855 2700	Radius Bushing (Front)	19	857 1000	Bushing
5	857 0800	Lock Nut	20	851 5201	Cable Fixing Nut
6	857 0500	Pivot Nut	21	857 9003	Cable Fixing Bolt Assembly
7	857 0700	Arm Return Spring	22	857 9005	Brake Shoe Assembly
8	851 2101	Arm Washer	23	831 6600	Cable Adjusting Barrel
9	831 9043	Cable Adjusting Barrel & Lock Nut	24	831 6700	Cable Adjusting Lock Nut
10	857 9004	Brake Arm "Y" Shape	25	855 2600	Radius Bushing (Rear)
11	857 0600	Arm Spacer	26	857 0400	Pivot Bolt (Rear)
12	857 9001	Brake Arm "C" Shape	27	855 7700	Sunken Pivot Bolt for Front (Option)
13	857 0300	Pivot Bolt (Front)	28	855 7400	Sunken Pivot Nut for Front (Option)
14	857 9002	Brake Shoe	29	855 7600	Sunken Pivot Bolt for Rear (Option)
15	857 1300	Tire Guide	30	855 7500	Sunken Pivot Nut for Rear (Option)

BRAKE LEVER

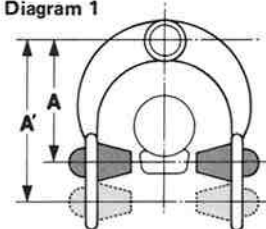


ITEM NO.	PART NO.	DESCRIPTION
1	847 9001-2	Lever
2	843 0100	Lever Bracket
3	843 0500	Pull-Up Stud
4	843 0400	Bushing
5	843 9003	Clamp Assembly (φ23.8mm)
6	843 0901	Pull-Up Nut
7	843 1000	Rubber Cover
8	840 33000	Front Complete Cable
9	840 33100	Rear Complete Cable
10	855 9009	Outer Band (1") 3 pcs.

Caliper Brake Specifications

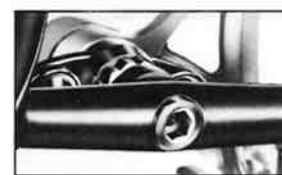
- Weight: Front 159g./Rear 157g.
- Material: Light Alloy
- Surface Finish: Almite Finish
- Type: Quick Release System Sidepull Type with Tire Guide
- Size: A-A': 43-57mm (1-11/16"-2-1/4") (Diagram 1)
- Optional: Sunken pivot bolt system. (Photo)

Diagram 1



Brake Lever Specifications

- Weight: 209g. (Including rubber cover) per pair.
- Material: Light Alloy
- Surface Finish: Almite Finish
- Type: Hooded Lever with rubber cover
- Assembly Band Diameter: φ23.8mm (φ15/16")
- Inner Cable Diameter: 1.6mm (1/16")



Brake Lever Assembly

- 1) Loosen the clamp nut and attach the clamp band to the handle bar. Ensure at this time that the bottom of the handle bar grip is level with the tip of the brake lever. (Diagram 2)
- 2) Tighten the clamp nut and fix the brake lever to the handle bar. Clamp nut tightening torque should be 40kg-cm. (35 in-lbs.). Please use the 8mm (5/16") socket wrench (Model TL-WR10) for tightening. (Diagram 3)
- 3) Next assemble the cable to the brake lever:
 - First, attach the outer end guide to the outer cable and then insert the inner cable.
 - Push the inner cable end, with outer end guide, into the hole on top of the rubber cover.
 - Next, insert the outer end guide into the top section of the lever grip and pull the inner cable through about 50mm. (2"). Then hook the inner cable end onto the cable stopper. (Diagram 4)
- 4) Fix the outer cable to the frame by the outer band. (This applies only to the rear caliper brake lever.)

Diagram 2

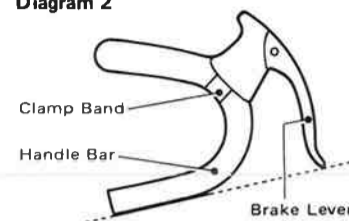


Diagram 3

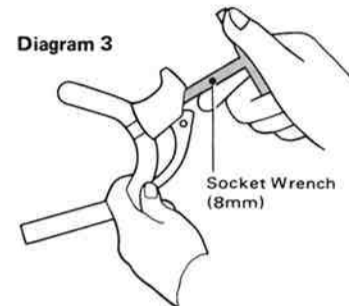
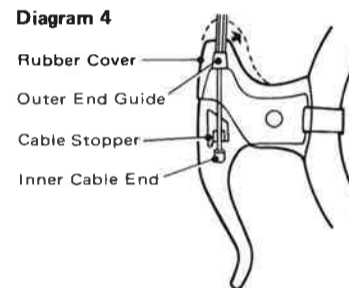


Diagram 4



Caliper Brake Assembly

- 1) Assemble the brake to the frame in the usual way. Tighten the pivot bolt lock nut temporarily only.
- 2) Next, to adjust the brake shoe position loosen the shoe fixing nut in order to release it for free movement. Now align the brake shoes with rim and position them about 1mm (1/32") lower than the outside diameter rim edge. (Diagram 5) Finally, tighten the shoe fixing nut. Tightening torque should be 50-70kg-cm. (43-60 in-lbs.)
- 3) To fix the brake cable, set the quick release lever to the "CLOSE" position. After assembling the cable to the brake lever, thread it through the adjusting barrel and cable fixing bolt and then secure by the cable fixing nut. At this time set the cable so that the clearance between the rim and brake shoes is a total of 3-4mm. (1/8"-5/32") on both sides. Tightening torque of the cable fixing nut should be 50-70kg-cm. (43-60 in-lbs.). (Diagram 6)
- 4) Using the hexagon spanner (6mm) (1/4") adjust the pivot bolt by turning to left or right in order to make the clearance between both brake shoes equal.
- 5) Assembly is much easier if the head of the pivot bolt is held in position by the hexagon bolt when tightening. Tightening torque should be 80-100 kg-cm. (69-85 in-lbs.)
- 6) Adjustment . . . On completion of assembly confirm that the brakes work properly by actual testing.

Diagram 5

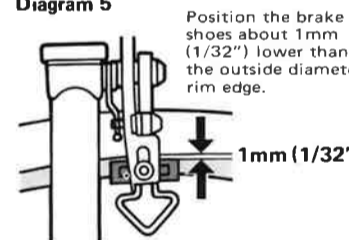
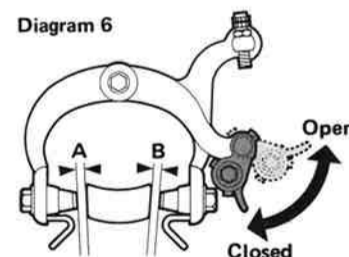


Diagram 6

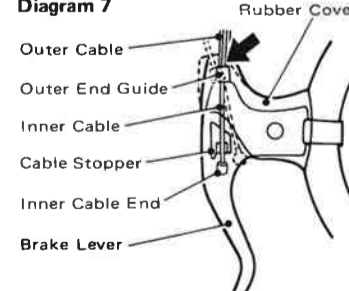


Set the cable so that the clearance between the rim and brake shoes (A + B) is a total of 3-4mm. (1/8"-5/32").

Cable Release Procedure

- 1) First remove the wheel. Then grip the caliper brake so that the inner cable moves toward the brake lever. Next, with the other hand, grip the outer end guide, through the rubber cover, and manipulate the inner cable end free of the cable stopper. (Diagram 7)
- 2) Now release the caliper brake so that the inner cable is ready for removal by pulling outer cable strongly. This completes cable removing procedure.

Diagram 7



Note

- 1) Keep all oil away from the brake shoes and rims.
- 2) If the brake shoes become oily, wipe the brake shoes and rims carefully with alcohol.
- 3) If the brake does not function well, check the brake shoe clearance and check the smoothness of the cable.

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