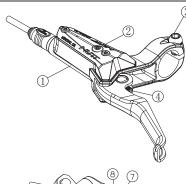
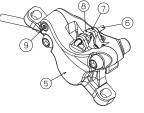
congratulations-your new bicycle has been fitted with the powerful .low-maintenance hybraulic NUTT disc brakes please read these user instructions carefully before you use your NUTT product .Always observe and follow all instructions in user.

Y-2 HYDRAULIC DISC BRAKE



NI-	Б	O+-
No.	Des	Qty
1	BMC assembly	1
2	Bleed screw	1
3	Clamp screw	1
4	Push rod	1



No.	Des	Qty
5	Caliper assembl	y 1
6	Disc pad pin	1
7	Disc pad	2
8	Dlsc pad spring	1
9	Bleed screw	1

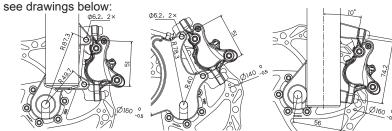
□ STANDARD FITTINGS

- 1.Y-2 caliper is compatible with MANITOU front forks with a distance between mounting of 74.2mm. It can be converted to international standards by using our front and/or rear adaptor brackets.
- 2. Mounting bolts: M6 x 18mm (incl. washer) x 4 pcs.
- 3.Disc rotor: 160 for the front and 140 for the rear; using adaptor brackets, it can be 180 for the front and 160 for the rear or 203 for the front and 180 for the rear.

□ RELATED MOUNTING SPECIFICATIONS

1. Specifications of front fork and rear dropout

Y-2 is compatible to International Standard and MANITOU front forks,



The specifications of the hubs for Y-2 disc brake system is the same as international standards, see drawings below:

			9 0 0	> -
Hub	А	В	(P) P	
Front hub	10.5	(15.3min)		†
Rear hub	15.25	(15.3min)		
	•		0 0	~6-M5X0.8 A

Y-2 caliper is completely sealed, and has been tested to take high pressure. DO NOT loosen any screw/bolt on the caliper (the bleed screw can be loosened only when changing brake fluid); otherwise it could cause leaking and consequently no braking.

*Warning: No brake fluid leaking is allowed. Riding should be stopped at once when there is leaking. Repairing should be performed by qualified dealers!

4.Rotor

Y-2 rotor specifications are 160 x 1.8mm (thickness) for front, 140 x 1.8mm for rear. They can be 180 x1.8mm for front, 160 x1.8mm for rear or 203 x 1.8mm for front, 180x1.8mm for rear when using adaptor brackets.

- *Warning: 1. Under normal riding condition, there will be slight wear on the rotor, wear will be greater after more braking. Therefore it is required to check the wear on rotor regularly. The disc rotor should be changed when it has been deformed orthickness
- 2. After a long time and or intensive braking, the temperature of the rotor becomes high. Do not touch the rotor.

□ASSEMBLY

*Warning: As the brake pads are self-adjusting. DO NOT pull the brake lever before it isfully assembled with the rotor in the caliper slot. The more pulls on brake lever without the rotor in the caliper slot makes the gap between brake pads becomes too narrow. If the brake pad space is too small, insert spacer between brake pads to increase gap and push them back to attain the ideal gap.

1. Use the 6 rotor screws (T25 Torquekey, Torque 50-60 kgf-cm) to tighten the disc rotor onto the disc hub.

XCaution:

- (1). Wear gloves first to avoid contamination to rotor by bare hands.
- (2). The 6 rotor screws must be tightened before riding.
- (3). The 6 rotor screws should be tightened in a diagonal sequence.
- (4). The 6 rotor screws should be replaced after disassembly for 3-4 times as the Nylokwill not function correctly.
- (5). Use cleaning naphtha to remove contamination on rotor.
- (6). Do not allow any oil or grease to get onto the rotor. If the rotorsbecome contaminated, please use cleaning naphtha to clean.
- 2. Assemble the wheel on to the front fork or rear dropout and then tighten the screws.
- 3. Assemble the caliper on to the front fork or rear dropout:
- (1) .International standard front fork:
- **Tighten the front or rear adaptor bracket onto the front fork or dropout. (Use 2 pcs M6x18 mm bolts, Torque 905 kgf-cm).
- Mount the caliper to the adaptor bracket with 2pcs M6x18 bolts (Do not tighten the bolts, so that the caliper can move freely on the bracket).
- Mount the caliper to the MANITOU fork with 2 pcs M6 x 18 bolts. (Do not tighten the bolts, so that the caliper can move freely on bracket)
- 4. Pull the brake lever to make the brake pads clamp to the disc rotor. (Torque 30-35 kgf-cm).
- 5. Pump brake lever 5-8 times then pump and hold brake lever. And then alternatively gradually tighten the M6 screws. (Torque 905 kgf-cm)
- 6. Spin the wheel to make sure the disc rotor is clear to brake pads. If it is not clear then slack the bolts and redo step V above.
- 7. To adjust reach of brake level's push rod, use 2mm Allen key to adjust reach. (Clockwise for larger angle; Anti-clockwise for smaller angle.)
- 8. Test riding:

Braking force on the first 10-30 pulls is not as powerful. (New brake pads need to be bedded in) [*Warning: Do not ride at high speed when doing test riding, keep safe distance.]

□ Maintenance

1.Brake pad replacement:

Y-2 hydraulic caliper is designed with self-adjustment brake pad function, No pad adjustment is required before the brake pads are worn out. It is required to stop riding and change new brake padswhen the brake lever needs to be pulled with a large travel to stop the bike or there is noise between the brake pads and rotor.

*Warning: Keep the brake pads free from oil or grease; otherwise braking function may fail.

(1). Remove the brake pad pin.

- (2). Remove used brake pads and use flat screw driver to push caliper pistons fully back. See Picture 1
- (3). Place new brake pads with brake pad spring in position, insert brake pad pin through the hose on caliper. Bend the open end of pin to keep the pin from moving out. See Picture 2
- (4). Spin the wheel and make sure it is clear between the rotor and brake pads. If it doesn't clear, redo the step VI in Assembly as above.

XCaution:

1. Braking force on the first 10-30 pulls is not as powerful (New brake pads need to be bedded in). Do not ride at high speed when doing test riding, keep a safe distance. 2. It is normal that there might be braking noise in the wet. The noise will disappear after the brake pads become dry. 3.Before riding the bicycle, please check the thickness of the brake pads. When the wear of the brake pads exceeds 0.8 mm the replacement of the pad is recommended. When the total thickness of the worn brake pad is less than 2.7 mm, the pads must be replaced to ensure the safety riding

*Note: For the hydraulic brake of the oil pipe turnable installation method, it is recommended that the user tighten the connector screw with a tool once a month to avoid the phenomenon of oil leakage due to the loose connector screw.

2. Changing brake fluid:

- Y-2 hydraulic disc brake uses Mineral Oil. Other brandedmineral oil for hydraulic disc brake system is also OK to use.
- *Warning: Never add or mix with DOT brake fluid or any mineral oil not for hydraulic brake use.
- (1). Tools required:
- ·Empty container(for used fluid)
- ·Mineral oil (30cc)
- ·T10 torque key
- ·Cleaning naphtha and cleaning cloth ·Bleed kit
- (2). Connect the syringes to plastic tubes and connect the adaptors to the other end of plastic tubes.
- wrench. See picture 3

(3). Remove the bleed screw on caliper using a T10 torque

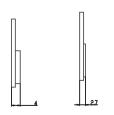
- (4). Connect on of the syringe with adaptor to the bleed hole on caliper. See picture 4
- (5). Remove bleed screw on BMC. See picture 5
- (6). Use the syringe connected to caliper to draw out the used brake fluid, keep it in acontainer. (Please take care of the used fluid properly to protect environment).
- (7). Draw fresh brake fluid into the syringe, make sure that there is no air bubble in the brake fluid then connect the adaptor to caliper.
- (8). Connect the other syringe with adaptor to brake master cylinder. See picture 6



Photograph1

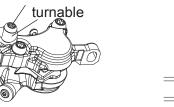


Photograph2



Worn to the Standard thickness (new brake pad) (needs replacing)

connector screw





Photograph3



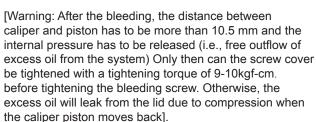
Photograph4

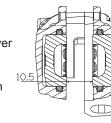


Photograph5

(9). Start bleeding:

- ① Pump the syringe at caliper side to inject brake fluid i nto the system until brake fluid flows into the other syringe at the BMC side and both syringes have roughly equal amount of brake fluid.
- ②Remove the syringe from BMC, push syringe to get air out and connect syringe back to BMC.
- ③Pull brake lever fully back and use hand or a piece of string(cable tie etc.) to keep holding the brake lever. See picture 7
- 4 Pump both syringes alternatively until no air comes out fromthe system.
- ⑤Remove the adaptor on caliper side and resume the bleed screw (Torque 9-10 kgf-cm)
- 6 Release brake lever, pump the syringe at brake master cylinder side a few times until no air comes out.
- Remove the adaptor on BMC side and resume the bleed screw (Torque 9-10 kgf-cm)
- 8 Pump brake lever 5-8 times to check bite point. If bite point is too low, redo bleeding procedures.
- (9) If bite point is OK, bleeding is completed. See picture 8 (10). Clean the system by using a cleaning cloth with



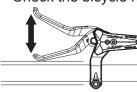


Photograph6

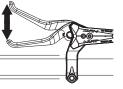
Photograph7

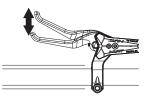
Photograph8

Check the bicycle handle



cleaning naphtha.





HARD

If the bicycle handle is loose, please redo bleeding and degasing process.

A BIT HARD

3. Hose exchange or hose shortening:

(1). Tools required: ·Empty container (for used fluid)

·Mineral oil 30cc

·Clean naphtha and clean cloth ·Bleed Kit

·T10 Torque Wrench

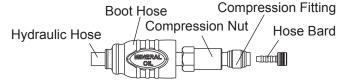
·Hose cutter ·Compression fitting

·Hose barb *Hose must be of correct specification.

.8mm open-ended wrench

(2). Cutting hose:

- ①Re-route the hose to approximately the length required from caliper end and marked with a pen.
- ②Slide back the boot hose past the cutting mark.release the compression nut past the marked length
- 3 Using the 8mm open-ended wrench unscrew the compression nut from the BMC. ④Pull the hose out of the BMC and ensuring the hose remains higher at all times than
- the caliper.



5 Slide the compression nut past the marked length

- (6) Trim the hose to the position previously marked, slide on the new compression fitting. insert the hose barb pushing fully into the hose up to the shoulder. (Warning: the hose barb has to be completely in the hose to avoid the oil leak and the possible braking failure risk).
- ⑦ Re-insert the hose into the BMC pushing firmly, slide the compression nut and screw ®Tighten the compression nut with an 8mm open-ended wrench to between 50 -60
- kaf-cm torque.
- (II) Add braking fuild following the steps in the changing brake fluid section.
- (3). Hose replacement: Please contact a qualified dealer for correct replacement accessories.

ACHTUNG

- 1.Do not use force to pry the caliper pistons in or out, this may damage the pistons and thereby spill brake fluidoverthe reservoir top cap.
- 2.Do not pull the brake lever before installing brake pads. Otherwise, the caliper pistons would protrude abnormally or even fall off.

Correct procedures:

When the brake pads are not installed, use a flat head tool to push the caliper pistons back to the reset position. Please be careful not to damage the pistons. If the caliper pistons are difficult to push back, remove the brake lever bleed port screw and then repeat the previous process. (Note that brake fluidmay spill over the reservoir)

ACHTUNG

When riding a bicycle for the first time, it is normal to have a light disc brake rub or insufficient braking force. Both issues would be automatically eliminated after a certain distance of riding.

□ Product warranty

- 1. During the warranty period, if damage occurs under normal use according to the instruction and operation manual, our company will provide professional after-sale service, but there are exceptions; the warranty last 18 months from the sale of the disc brake (starting from the production date of the caliper laser number), but the brake pads are not warranted
- 2.If damage is caused by the following listed reasons, it will not be covered by the warranty during the warranty period. However, the company is still happy to serve you by charging parts and service fees.
- The followings are not covered by the warranty:

Damage caused by collision due to external force

- Failure to perform proper maintenance according to the manual
- Arbitrary disassembly and assembly or not using original parts
- Abnormal or improper use
- Damage occurs due to force majeure
- Selfy-modified or repaired by dealers unauthorized by the company