

## CARGO BIKE BRAKE OPERATION MANUAL

**WARNING!** BEFORE INSTALLING AND USING RIDEREVER PRODUCT IT IS CRITICAL TO YOUR SAFETY THAT YOU READ AND STRICTLY ADHERE TO THE INSTRUCTIONS IN THIS MANUAL. FAILURE TO DO SO COULD CAUSE SERIOUS INJURY AND/OR INVALIDATE YOUR LEGAL RIGHTS. KEEP THIS MANUAL IN A SAFE PLACE FOR FUTURE REFERENCE AS IT CONTAINS INFORMATION CRITICAL TO YOUR SAFETY.

**Note!** AS WITH ANY MANUAL, THIS ONE IS SUBJECT TO PERIODIC UPDATES. CONTACT YOUR MECHANIC, OR CHECK FOR UPDATES ON OUR WEBSITE, ([www.riderever.com](http://www.riderever.com)).

### IMPORTANT NOTICE

- Always seek help of a professional mechanic for mounting, disassembling, or adjusting the brake system. Any damage caused by improper assembly or follow-up maintenance will not be covered by the warranty.
- This manual provides information for mounting, using, and maintaining the braking system in a proper and safety ways. Follow manual procedures to ensure the best performance and operating life for your braking system.

**CAUTION!** Carefully follow SAFETY GUIDELINES for proper braking system function. This may affect the function of the brake.

**CAUTION!** Directs your attention toward unsafe practices which could result in damage to the equipment and injure yourself.

### SAFETY GUIDELINES

- For the best performance, follow the standard mounting procedures.
- Only use products recommended in this manual, to avoid system damage and potential danger.

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- Never carry out any work or make any changes (e.g. disassembly, grinding/painting etc.) to your RIDEREVER product that are not specifically permitted and described in the manual.
- RIDEREVER braking devices offer a higher stopping power than normal brakes, wheels could be locked up with less effort. Practice several times before riding, to get used to the disc brake system. Be careful as a locked wheel can result in loss of control of the bicycle and can cause injuries.
- Wet weather impairs traction and braking force, making it much more difficult to control the bike. More attention must be paid while riding in wet conditions in order to avoid accidents.
- The required braking distance will be longer during wet weather. Reduce your speed and apply the brakes early and gently.
- Test the brakes and your braking technique on flat, even ground before using the bike in more severe conditions.
- The efficiency of the brakes depends on many factors other than brake system itself. These include the speed of the bike, wheel-terrain contact, brake lever application force, correct installation and maintenance, hydraulic brake fluid, levers, brake shoes or pads, condition of the bike, loading weight, correct braking technique, weather conditions, terrain spec., and so on.
- Always fit the spacer between brake pads when transporting bike with wheels off.
- Do NOT use brake pads supplied by other manufacturers. This will void your warranty. Only use original RIDEREVER products.
- Disc brakes have a burn-in period, and the braking force will gradually increase as the burn-in period progresses. Make sure that you are aware of any such increases in braking force when using the brakes during the burn-in period. The same thing will happen when the brake pads or disc brake rotor are replaced.

### WARNING!

- Brakes are essential for the safe use of a bicycle. The improper setup and usage can make you lose control and cause accident, with unpredictable consequences and potentially serious injuries.

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- All RIDEREVER brake systems requires a break in (bedding in) period to obtain top performance. We recommend riding bike on a flat surface under speed of 15 km/h and braking it to speed 5 km/h for 20 times, then increase to a higher speed 30 km/h to brake another 20 times.

### BEFORE EACH RIDE

- Each pad should have a thickness of 0.5mm or more. Less than that is considered worn. Change it for your own safety.
- Front and rear brakes should work correctly with sufficient braking force.
- Make sure there are no fluid leaks in the system by applying the lever and holding it down as far as it will go. Check the hose connections and the brake fluid reservoir for any leaks. Consult a professional mechanic if there are fluid leaks, as it can cause a serious accident!
- The lever for rear brake is suggested to set on your habitual side, to ensure you a better stability during sudden brake. The wrong setting can cause rollover with serious injury. Have professional mechanic swap the lever position if they are incorrect.
- All fasteners should be tightened to the correct torque spec. Find related information (torque & tool) in the following operating instructions.

### WARNING!

- NEVER touch the caliper or rotor immediately after use, as disc brakes may get VERY HOT. Make sure the brakes have cooled down before any adjustment/maintenance.
- Never put your hand near or inside rotating parts. The disc brake rotor is sharp enough to inflict severe injury to your fingers if caught in the openings of moving discs.
- Be careful not to allow any oil or grease get onto the rotor or pad, otherwise the brakes may not work correctly. If any oil or grease gets on the pad, you should replace the pad. If any oil or grease gets on

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the rotor, you should clean the rotor. If this is not done. The brakes may lose function.

### MINERAL OIL

#### CAUTION!

- Only use mineral brake fluid from a new bottle. NEVER use old fluid, or fluid that has been bled out of the system. Old fluid can contain water and this will compromise the performance and function of the system.
- Contact with eyes may result in irritation. In the event of eye contact, flush with fresh water and seek medical assistance immediately.
- Never use DOT brake fluid.

### BEFORE ASSEMBLY

#### CAUTION!

- When assembling the fasteners, always make sure they are tightened to the correct torque setting.
- Use a torque wrench provided with the required hex or TORX® inserts to install the fasteners.
- Never apply the lever without the pads in place or with the wheel removed. If this does happen, you will have to press the brake pads back into the caliper with a clean piston press tool.
- When installing new brake pads, be very careful to avoid contamination with oil or grease.
- Before each use make sure all the screws and bolts are tightened to the correct torque found in the manual.
- Must use a torque wrench to assemble the fasteners.
- Only correct mounting of the system and it's various support elements will ensure the safety of the cyclist and the exceptional performance of RIDEREVER disc brakes.
- Except bleed port screws, all screws require to apply medium strength threadlocker before assembly.

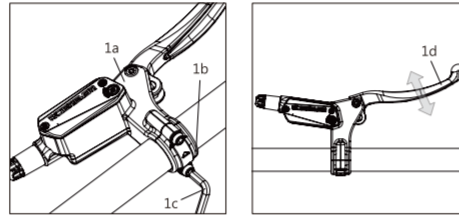
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### ASSEMBLY

#### TOOLS REQUIRED

The following tools are necessary to install the RIDEREVER hydraulic disc brakes.

- T25 Torx screwdriver
- 2mm Allen wrench
- 4mm Allen wrench
- 5mm Allen wrench
- Torque wrench



#### 1. MOUNTING THE BRAKE LEVER

- If need to adjust the hose length, please refer to the instruction of the hose length adjustment or the SEZ plug operation manual.
- Slide the brake set 1a to the handlebar, and lightly tighten the brake lever clamp 1b with the "ARROW" sign upwards(as shown in the figure) to hold the lever in place. Test out the rider position on the bike and adjust it to rider's position. Tighten the clamp screw 1c to 4Nm±5% by using a 4mm Allen wrench.
- Press the brake lever 1d, release it slowly and repeat for several times for function check.

**CAUTION!** Do not press the brake lever before hose assembly.

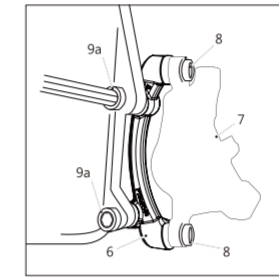
#### 2. CALIPER INSTALLATION

- Caliper should mount on the frame or fork with no interference.
- All screw sets should have washer assembled, and medium strength threadlocker applied. (Pair washers should pay attention to the concave & convex fitting)

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### 2-1 INTERNATIONAL STANDARD MOUNT OR SIMILAR

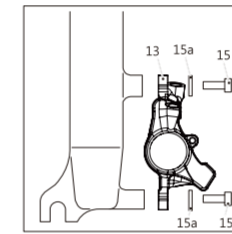
- Place adapter 6 on frame (or fork) with "UP" toward wheel turning direction.
- Assemble adapter 6 on fork with screws (9a) by 5mm Allen wrench on torque 9Nm±5%
- Assemble caliper 7 with screw sets 8 by 5mm Allen wrench. (don't completely tighten)
- Slightly loosen screws 8, pull brake lever 2-3 times to align caliper and rotor.
- Keep the brake lever pulled and tighten screw sets 8 to a torque setting of 9 Nm±5%.



### 2-2 POST MOUNT TYPE

#### 2-2-1 Installing directly onto a POST MOUNT interface

- Assemble caliper 13 with screw sets 15 by 5mm Allen wrench. (don't completely tighten)
- Slightly loosen screws 15, pull brake lever 2-3 times to align caliper and rotor.
- Keep the brake lever pulled and tighten the screw sets 15 with a torque setting of 9 Nm±5%.



#### 2-2-2 Assembly with POST MOUNT adapter

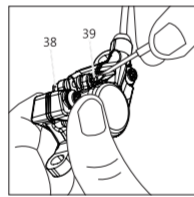
- Put in all the parts, including the caliper 19 and adapter 20 on the screw following the order shown in the figure.
- Insert screws to connect caliper and the fork, making sure "UP" faces upwards.

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### GENERAL MAINTENANCE OPERATIONS

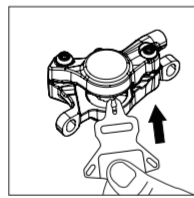
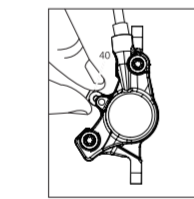
#### TOOLS REQUIRED

- T10 TORX screwdriver
- 3mm Allen wrench
- 8mm wrench
- Torque wrench
- Piston press
- Hydraulic hose cutter
- Needle insertion tool
- Brake Bleeding Kit



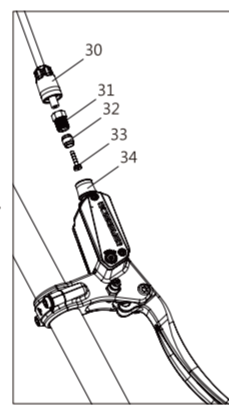
#### 1. PAD REPLACEMENT

- Remove circlip 38 and unscrew pad fastening pin 39, using a 3 mm Allen wrench.
- Replace new pads 40.
- Assemble fastening pin 39 using a 3 mm Allen wrench at a tightening torque of 2 Nm±5%, then refit circlip 38.
- In case of piston coming out from its original position, dis-assemble caliper to push them back evenly (be careful not to twist the pistons) with a piston press tool.
- Use tools other than professional piston press tool may cause pistons damaged and disfunction.
- Insert RIDEREVER 2 in 1 spacer (if you are not going to mount the caliper back on bike)



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- Paying attention to avoid oil spillage, reinsert part 30, new compression nut 31, and new compression bushing 32 back to the hose in the sequence shown in the picture.
- Using Needle Insertion Tool to insert o-ring assembled needle 33 into the hose.
- Refit the hose back to brake lever body.
- Apply a tightening torque of 8 Nm±5% to compression nut 31.
- Move rubber protector 30 to its initial position.



**CAUTION!** It is essential to use a torque wrench to assemble the compression nut (fasteners) with appointed torque setting. Incorrect assembly may cause hose detachment and lead to severe consequences for users and people around.

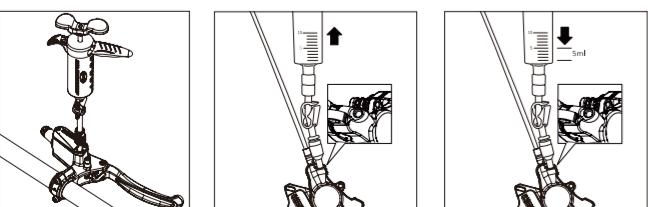
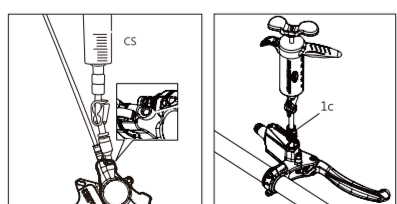
**WARNING!** Pay close attention while using cutting tools since its blade is very sharp and could cause severe injuries if not used properly. Do not use blades or hacksaws that might compress or break the hose, it can cause fluid leaks and system malfunctions.

- A hose that is too short will reduce bicycle handling and in case of severe cornering may stretch the hose resulting in its detachment from the lever or caliper. Never use a hose with improper length.
- Rider's safety and RIDEREVER brake performance can be ensured only under correct assembly with suggested parts.

**CAUTION!** Do proceed bleeding process every time after re-assemble hose back to the system.

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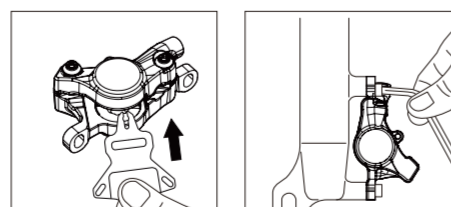
- Repeat this operation for at least 3-4 times until the air bubbles have completely flown out and collected in the syringes (when there is no more air in the system, syringe operation becomes harder)
- Press brake lever and release it slowly while pressing CS. This helps oil flowing for the final check.
- Circulate the oil from CS to LS 2-3 times to confirm there are no air bubble remaining.
- Slightly press on both syringes at the same time to fill the system. (try to keep CS side at the lowest level 5ml in the end.)
- Lock valve 4 on the CS, then remove CS from caliper.
- Tightening caliper bleed port screw by with a torque of 2 Nm±5%.
- Immediately clean any oil leaks using a clean cloth and isopropyl alcohol.



- Press brake lever and release it slowly while pressing LS. Repeat it several times, to ensure oil filling in the system.
- Lock valve 4 on the LS, then remove LS from brake lever.
- Tightening brake lever bleed port screw with a torque of 2 Nm±5%.

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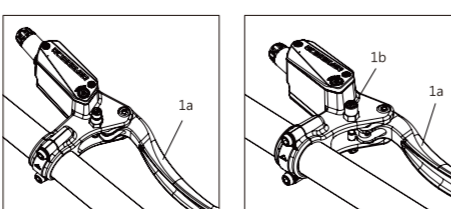
- Immediately clean any oil leaks using a clean cloth and isopropyl alcohol.
- Remove RIDEREVER spacer from the caliper unit as shown in the figure.
- Install the brake pads in the caliper, see PAD REPLACEMENT, page 9.
- Fit the caliper on the bicycle, see ASSEMBLY, Page 7.



#### LOCK DEVICE OPERATION-SIMPLE BUTTON VERSION

When apply the lock device, press 1a lever first  
In parking condition and press 1b button to lock the brake  
To release the brake, press 1a again let the lever return  
To normal place.

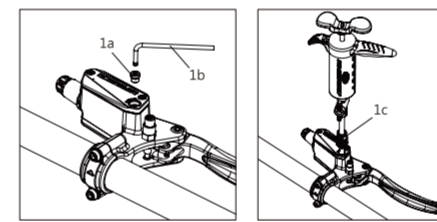
#### WARNING! DO NOT PRESS LOCK BUTTON WHILE RIDING



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### 3. BRAKE SYSTEM BLEEDING

- Use T10 Torx screwdriver, untight LS screw.
- Use Bleeding kit 1c for bleeding



### 4. AFTER BLEEDING, AIR-OUT OPERATION

**WARNING!** Brake bleeding is one of the most important steps to ensure a perfect operation for hydraulic system. The presence of air inside the system reduces its performance.

#### RIDEREVER RECOMMENDS:

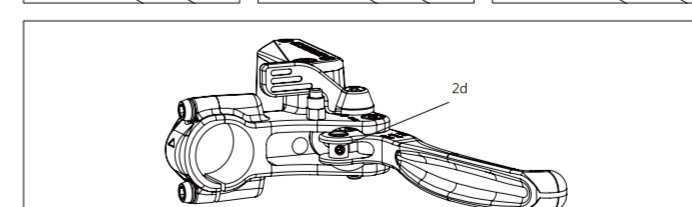
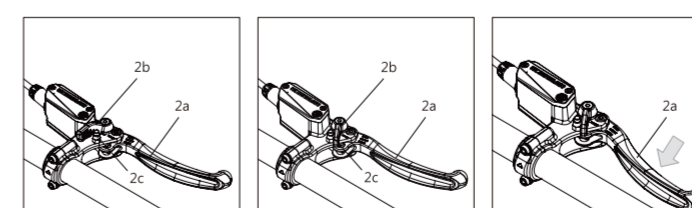
- Bleeding process should be performed by well trained mechanics. Do seek for professional helps.
- Use Elite/Pro JAGWIRE bleed kit.
- Use RIDEREVER or Finish Line™ Mineral Oil only.

If users lack of professional training decide to perform this operation by themselves, do follow these instructions with the maximum attention and consider that they are operating at their own risk.

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### LOCK DEVICE OPERATION-TWIST LOCK VERSION

- When apply the lock device, press 2c safety button first before twist 2b toward to 2a lever and then press 2a lever to lock the brake.
- To release the lock, press 2a lever, press 2c again for re-set, let the lever return to normal place.
- Adjust 2d by 2mm Allen Wrench to adjust the lever grip angle if feel the lock become untighten.



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### 2 YEARS LIMITED WARRANTY

This limited warranty is expressly limited to the repair or replacement of a defective product, at the option of RIDEREVER, and is the sole remedy of the warranty. This limited warranty applies only to the original purchaser of the RIDEREVER product and is not transferable. This warranty applies only to products purchased through an authorized dealer or distributor. The original purchasing receipt is required for claim applying.

This warranty does NOT cover the following:

- Damage due to improper assembly or follow-up maintenance or lack of skill, competence or experience of the user or assembler.
- Products that have been modified, neglected, used in competition or for commercial purposes, misused or abused, involved in accidents or anything other than normal use.
- Installation of components, parts or accessories not originally intended for or compatible with the RIDEREVER product.
- Natural wear and deterioration from normal use and aging.
- Man-made damage during bicycle assembly, include but not limit to remove, refit, or re-adjust on each parts.

In no event shall RIDEREVER be liable for any loss, inconvenience or damage, whether direct, incidental, consequential, or otherwise resulting from breach of any express or implied warranty or condition, of merchantability, fitness for a particular purpose, or otherwise with respect to our products except as set forth herein.

This limited warranty gives the consumer specific legal rights, and those rights and other rights may vary from place to place. This limited warranty does not affect your statutory rights. TO THE EXTENT NOT PROHIBITED BY LAW, THESE WARRANTIES ARE EXCLUSIVE AND THERE ARE NO OTHER EXPRESS OR IMPLIED WARRANTIES OR CONDITIONS INCLUDING WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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