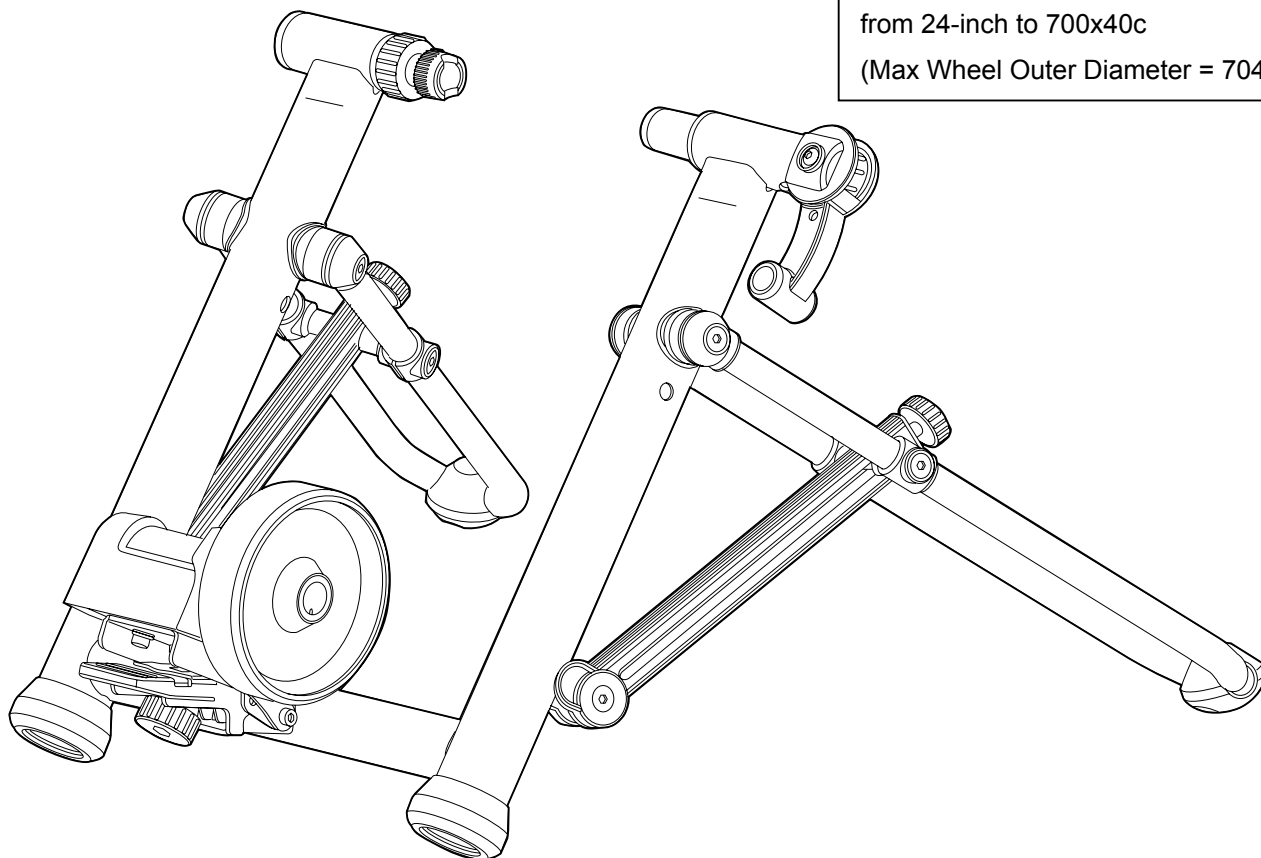


**Applicable Tire Size Capacity:**

from 24-inch to 700x40c

(Max Wheel Outer Diameter = 704 mm)



### Introduction

Thank you for purchasing the Minoura **V270** indoor bicycle trainer.

The V270 incorporates Minoura's new, patent pending Advanced-Magturbo Technology (AMT) on the flywheel that by design it simulates 35% heavier (= more effective) than its actual weight.

The new NEODYMIUM magnet is 4x stronger than typical Ferrite magnets and offers a much wider range of resistance from low to high all while providing equal step differentials to simulate real road riding.

The exclusive U-shape legs are lightweight but more stable than other trainers weighing much more.

And each leg can be adjusted +/- 10 mm individually to compensate for uneven surfaces.

Read this manual carefully and keep it for future reference.

### For More Information

*If you need help, please contact the shop first where you originally purchased this product or call the distributors in your own country. The distributors list can be found on our web site.*

#### **MINOURA NORTH AMERICA (for U.S. residents ONLY)**

Phone: 1-510-538-8599

Fax: 1-510-538-5899

Email: support@minourausa.com

#### **MINOURA JAPAN HEADQUARTERS (for ALL customers)**

1197-1 Godo, Anpachi, Gifu 503-2305 Japan

Phone: +81-584-27-3131

Fax: +81-584-27-7505

Email: minoura@minoura.jp

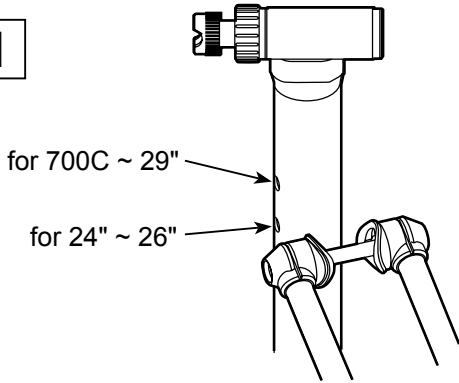
Web: www.minoura.jp

**MADE IN JAPAN**

# How To Assemble U-Leg

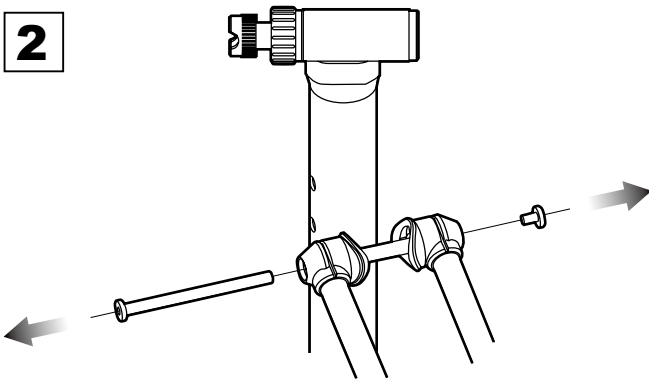
Required Tools: 2 x 5mm Hex Wrench (supplied)

1



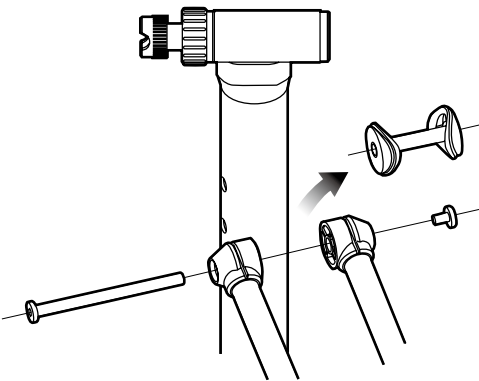
Choose the pivot hole for your bike size on the main pillar.

2



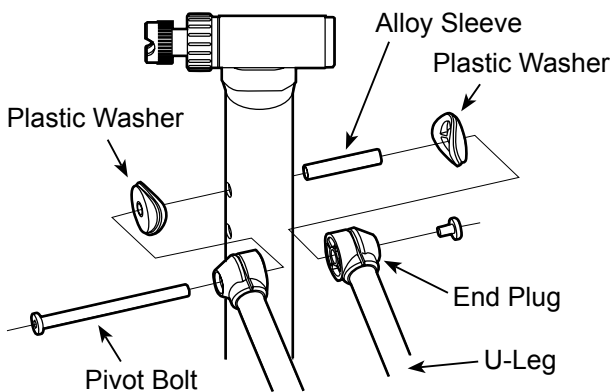
Once disassemble the pivot bolt.

3



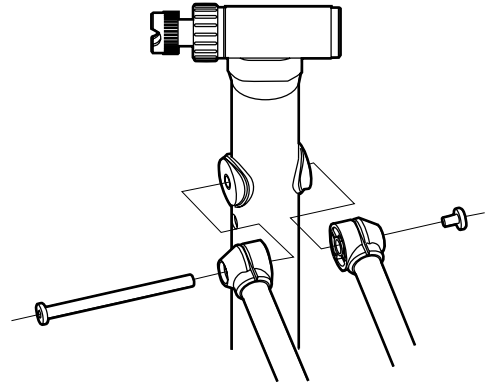
Remove the alloy sleeve and plastic washers.

4



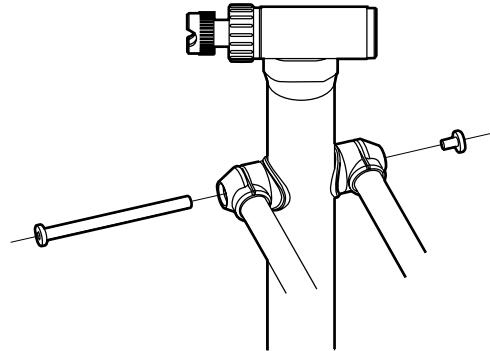
Insert the alloy sleeve into the selected hole, and put the plastic washers on both sides.

5



Attach the U-Leg to the main pillar.

6

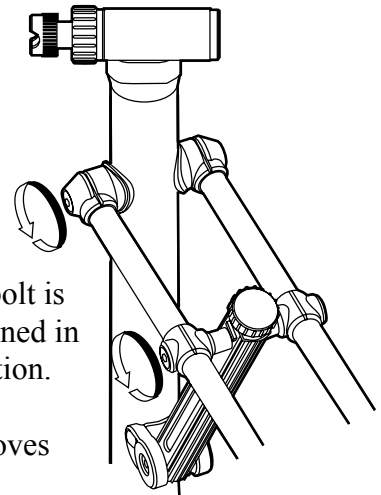


Check the plastic end plugs on the U-Leg are fully inserted and aligned to the hole. Then insert the pivot bolt and fully tighten the screw with using the supplied M5 hex wrenches.



*Be sure you fully insert the plastic end plugs to the U-Leg before putting the pivot bolt through them. Failure to do so will cause a problem that the legs will not be positioned in same height.*

7



The center guide bolt is intentionally loosened in the package condition. Tighten it slightly. Check each leg moves smoothly.



*You do not need to disassemble the center guide bolt. Just tighten.*

## How To Install Mag Unit & Foot Step

**Required Tools:** 1 x 5mm Hex Wrench (supplied)  
1 x 10mm Spanner (not supplied)

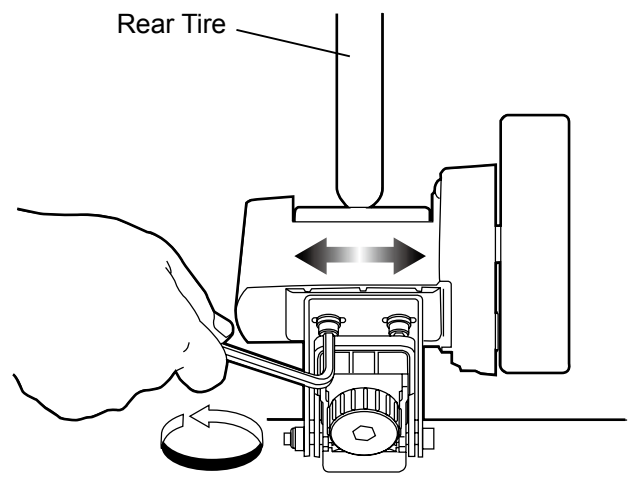
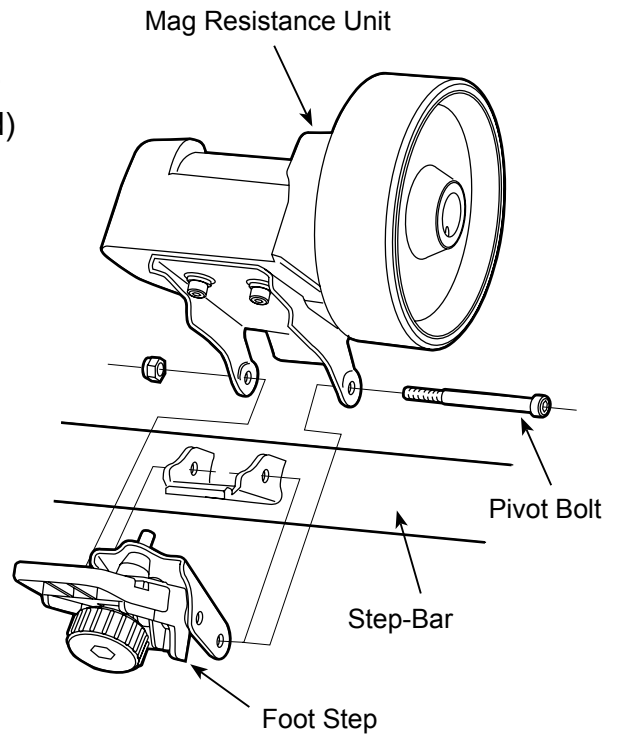
The Mag resistance unit and Foot Step now need to be installed to the frame.

Attach the Foot Step onto the bracket on the Step-Bar first, put the Mag unit over the Foot Step, then tighten both brackets together with the pivot bolt.



*Overtightening the pivot bolt will cause the Foot-Step to become inoperable. Make sure you unscrew (loosen) the pivot bolt by 1/4 - 1/2 turn once you completely tightened it. The Mag unit should be lowered towards the ground by its own weight at this point. If the pivot bolt is too loose, the Mag unit will drop quickly and you may be pinched between the frame and Mag unit. Adjust the tightening torque for the best operation.*

If you need to adjust the Mag unit position horizontally to set the tire in the center of the drive roller, loosen the backside screws and slide the Mag unit sideward. After adjusting, tighten both screws firmly.

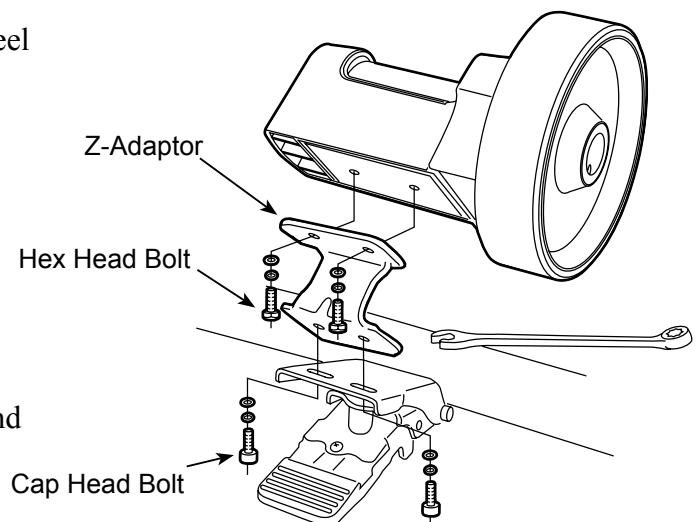


## How To Use Small Wheel Adaptor

If your tires is a 26" and smaller than 1.50" in width, you will need to use the supplied Z-shaped Small Wheel Adapter. (The tire size is clearly indicated on its side wall)

The direction of the Z-adapter is fixed so follow the arrow printed on the top and make sure it's pointing toward the front (toward your bike). If the drive roller cannot reach the tire, make sure the Z-adapter has been installed correctly.

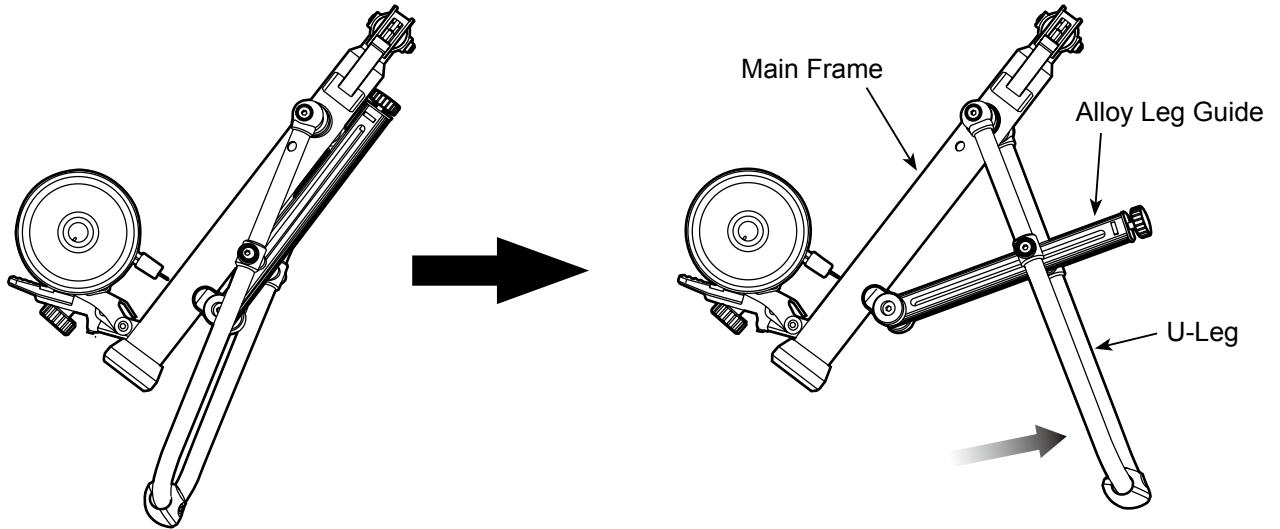
Use the original cap head bolts for the Mount Base, and use the supplied hex head bolts for the Mag unit.



## Placing V270 on Floor

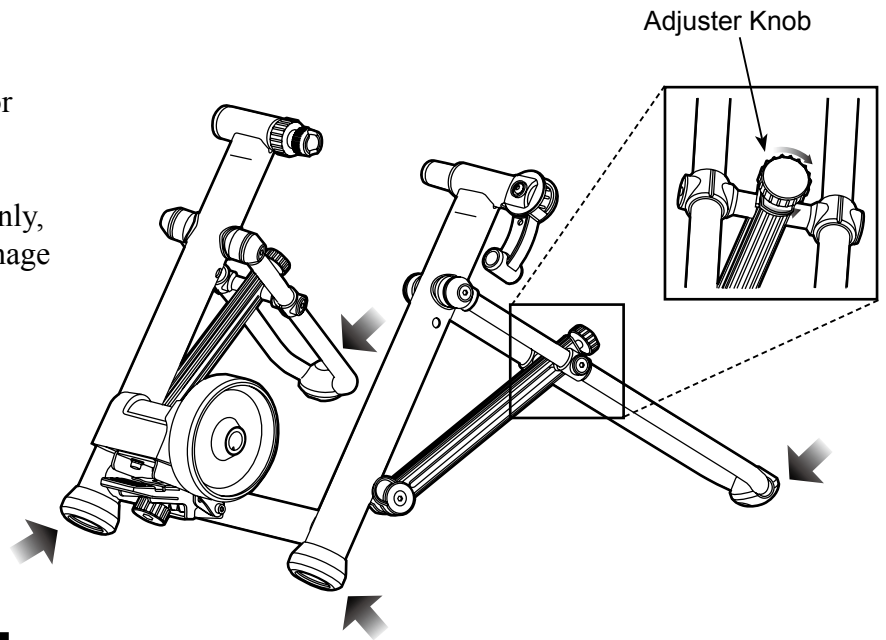
Fully open the legs and place on a flat and horizontal floor.

**!** To open the U-Leg, grab the main frame and the rubber cap on the U-Leg. Do NOT pull the Alloy Leg Guide directly, otherwise it may be bent or damaged.



Check that all 4 points are touching the floor evenly.

If all 4 points are not touching the floor evenly, the frame could be deformed and cause damage to the trainer and possibly your bike.



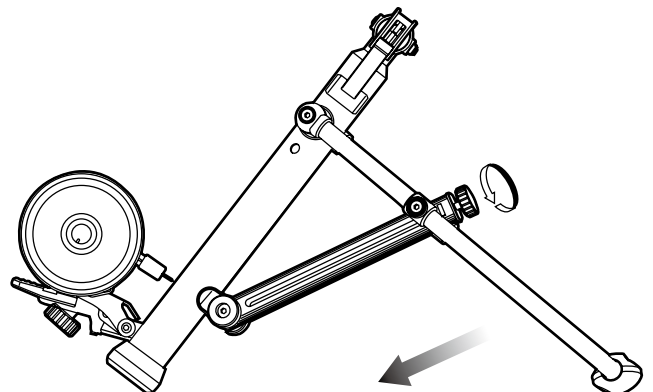
## About Leg Height Adjuster

Each U-Leg height can be adjusted separately by +/- 10 mm travel.

This adjuster allows for uneven floor or ground compensation to help insure proper stability.

When using the adjuster, be sure to check and make sure that all 4 points are touching the ground evenly.

And the trainer should be positioned as close as possible to the floor for better stability.



## How To Mount Your Bike

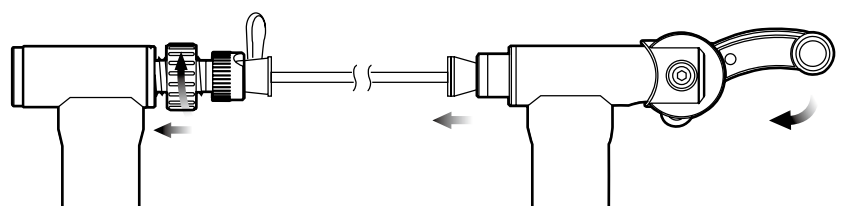
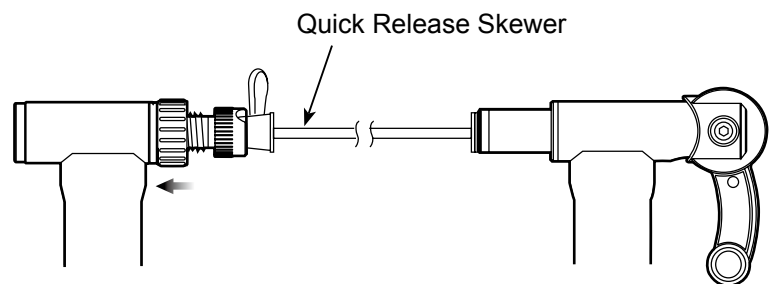
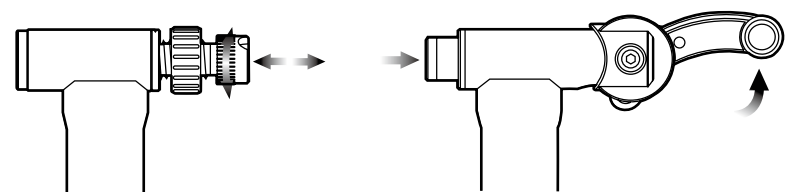
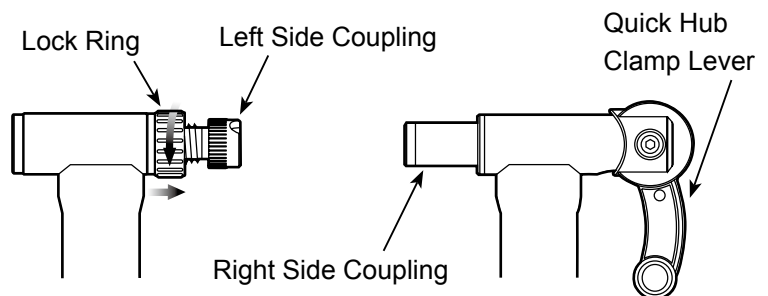
V270's coupling position is pre-adjusted in the factory to fit the 125mm standard rear hub width. If it is too loose or too tight to your bike, or if you use different width of rear hub like a track race bike, adjust the left side coupling as precisely as possible for maximum stability. Please note there is no adjustment on the right side (lever side) coupling.

**!** *The coupling cone shape is designed to fit the supplied quick release skewer perfectly. We strongly recommend you to replace your rear wheel skewer to the supplied one. We do NOT guarantee the stability while using V270 with your own skewer.*

**!** *If your bike's rear hub axle is NOT a quick release skewer type, but a hub nut type, you don't need to use the supplied skewer and replace the left side coupling bolt to the optional one; "Left Side Coupling Bolt for Fixed Hub Nut".*

*The following steps describe the micro adjustment of the left side coupling. This step is not always required and once fixed in the proper position, you should not need to adjust again. Once adjusted to fit your bike, simply operate the Quick Hub Handle Lever for a proper fit every time.*

- 1** First, loosen the red Lock Ring by turning it counter-clockwise.
- 2** The left side coupling is actually a bolt/coupling combination. Turn the coupling to adjust the position.
- 3** Raise the Quick Hub Clamp Lever up to retract the right side coupling.
- 4** Insert the left side hub end (quick release lever side) into the left side coupling cone.
- 5** In this position, place the other side of the bike into the right side (rear cog side) coupling cone. Make sure your derailleur cable goes OVER the coupling.
- 6** Now, push down (lower) the Quick Hub Clamp Lever until it fully engages the skewer or axle nut.
- 7** Make sure the Quick Clamp Hub Lever is lowered into its locked position and cannot be lowered any further. The frame may appear slightly open but this is normal. If the frame seems to be opened too widely, re-mount your bike following the instructions. Failure to do so could damage your bike and/or the trainer.



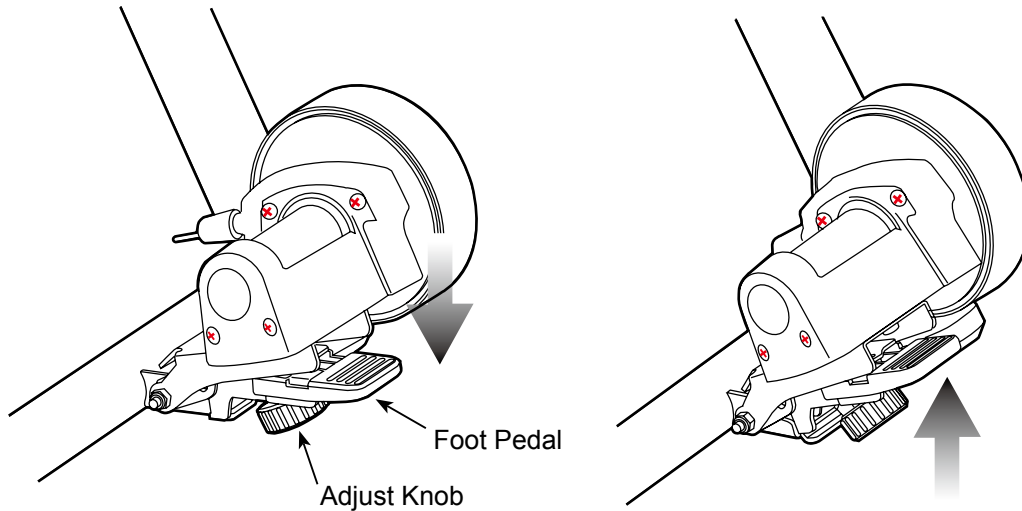
- 8** Now, grab the saddle of your bike and rock the bike back and forth to make sure your bike is securely in the trainer. Your bike should not move independently of the trainer where it is attached.
- 9** Tighten the red Lock Ring firmly to fix the left side coupling position.

## How To Use Foot Pedal

The Foot Pedal is a convenient device to engage/release the drive roller to/from the rear tire quickly, and it keeps the proper pressure of the drive roller to the tire without adjusting everytime you use the V270. To maintain the tire life as long as possible, you should adjust correctly.

**To engage the roller:** Push down the pedal

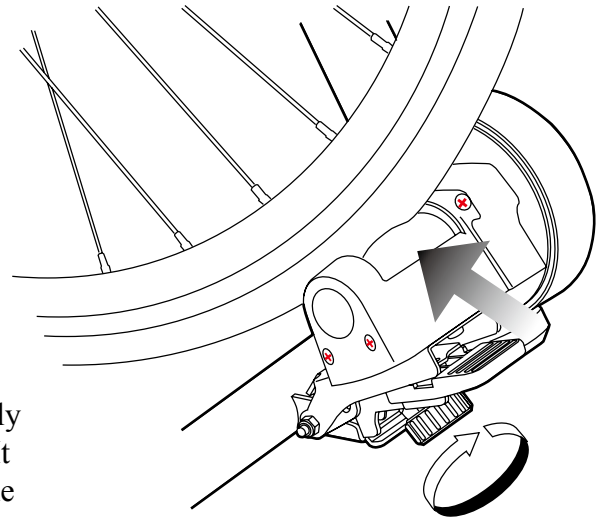
**To release the roller:** Pull up the pedal



*While we call this a "Foot Pedal", we do not recommend you use your foot to operate it. For accurate adjustment, please use your hand.*

## How To Maintain Proper Roller Pressure

- 1** Inflate the rear tire to maintain the air pressure properly. Too less air pressure should cause premature tire wear.
- 2** Lift up the Mag unit towards the rear tire until the clearance between the tire and roller is about 2 mm.
- 3** In this position, turn the red adjust knob under the Foot Pedal clockwise until the inside bolt touches the black steel base plate.
- 4** At this point, stop tightening the knob and gently but firmly push down the Foot Pedal to engage the tire to the roller. It is normal that the tire is compressed by 3-4 mm. Adjust the knob if the contact is not too much nor too little.
- 5** Now, hop on your bike and give it a spin. If your tire slips, tighten the knob in 1/4 turns until the contact is correct. If the tire drags or you smell burning rubber, back off contact in 1/4 turns until you achieve proper contact.



*If the roller pressure to the tire is not adjusted properly, premature tire wear can be expected. Too little pressure is worse than too much pressure for good tire life.*

- 6** If always using the same bike and tire, no further adjustment should be needed than operating the pedal.

## How To Operate Remote Shifter

Required Tool:  
1 x M4 Hex Wrench

V270 comes with a convenient remote shifter device. By installing it on your handlebar or stem, you can adjust the resistance level in 7 levels without getting off the bike.

The remote shifter should be used in conjunction with the gears on your bike to achieve maximum efficiency in your workout.


### How to install the remote shifter

- 1) Wind the flexible plastic band around the handlebar,
- 2) Put the hook to the gutter on the plastic shifter base,
- 3) Flip up the lever to lock.

The remote shifter is pre-adjusted to fit the standard handlebar size; 22mm (7/8") diameter.

If it becomes loose or too tight, or you need to install the shifter onto an oversized handlebar or stem, adjust the band length by turning the plastic screw on the band with an M4 hex wrench.

*(Please be advised that the hex wrench doesn't come in the package)*


 *The plastic band and screw are not so tough. Do not tighten too much. You should take off the hook before adjusting.*

### How to increase the resistance level

Twist the shifter lever toward "H" symbol.

### How to reduce the resistance level

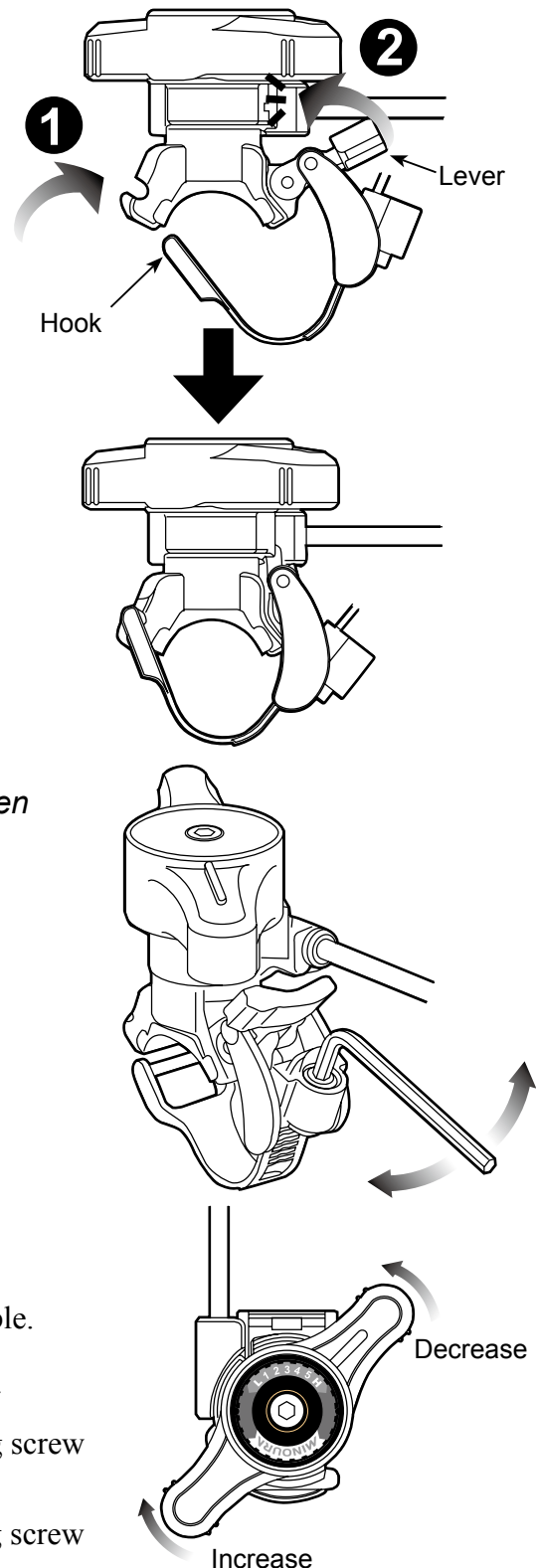
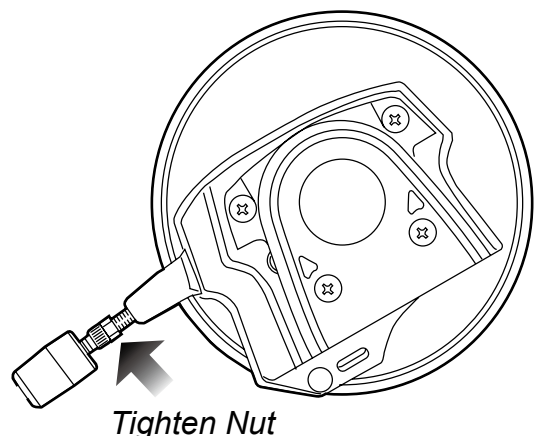
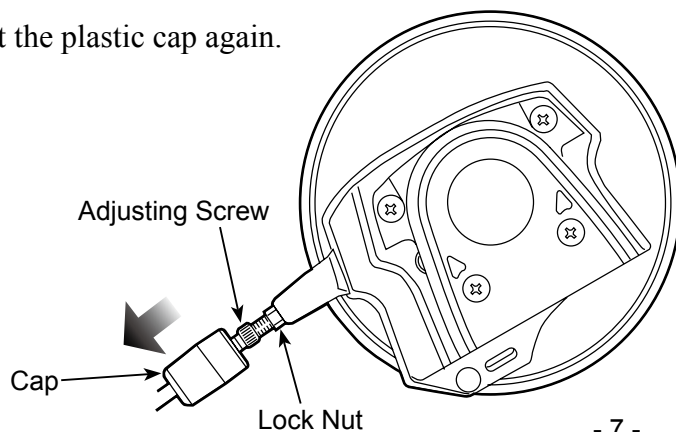
Twist the shifter lever toward "L" symbol.

 *"L" is not zero resistance. There is still some resistance at "L" level due to the roller compression to the tire.*

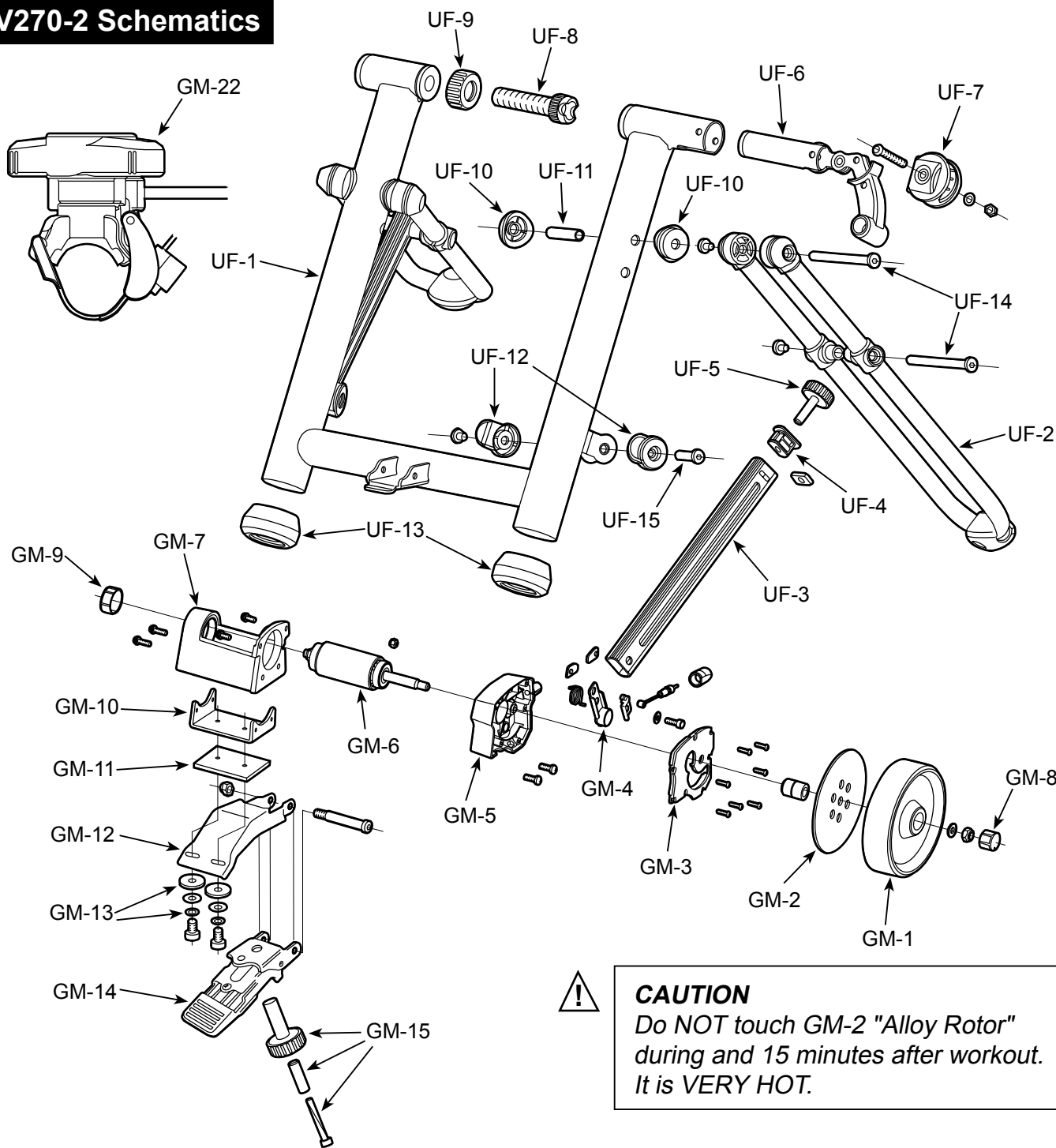
## How To Adjust Remote Cable

If you cannot shift at L or H position, it's time to adjust the remote cable.

- 1) Set the remote shifter lever at "H" position and straighten the cable.
- 2) Pull off the black plastic cap on foot of the cable, then the adjusting screw will appear.
- 3) While pushing the outer cable toward the shifter, push the adjusting screw to the outer cable.
- 4) Turn the lock nut until it touches the Mag unit.
- 5) Insert the plastic cap again.



# V270-2 Schematics



## CAUTION

Do NOT touch GM-2 "Alloy Rotor" during and 15 minutes after workout. It is VERY HOT.

UF-1	: Main Frame	GM-1	: V270 Flywheel
UF-2	: U-Leg (Chrome Plated)	GM-2	: Alloy Rotor
UF-3	: Alloy Leg Guide	GM-3	: Housing Cover
UF-4	: Height Adjuster Cap	GM-4	: Neodymium Magnet
UF-5	: Height Adjuster Knob	GM-5	: Main Housing
UF-6	: Right Side Coupling & Clamp Lever (Red)	GM-6	: Drive Roller, Axle & Bearing
UF-7	: Clamp Lever Guide	GM-7	: Drive Roller Holder
UF-8	: Left Side Coupling	GM-8	: Flywheel Nut Cap
UF-9	: Coupling Lock Ring (Red)	GM-9	: Axle End Cap
UF-10	: U-Leg Bushing	GM-10	: Mag Unit Fitting Bracket
UF-11	: U-Leg Pivot Sleeve	GM-11	: Rubber Shim
UF-12	: Alloy Leg Support Bracket Cover	GM-12	: Mount Base
UF-13	: Ruber Cap	GM-13	: Rubber Washer Set
UF-14	: Pivot Bolt Set (Long)	GM-14	: Foot Pedal
UF-15	: Pivot Bolt Set (Short)	GM-15	: Foot Pedal Adjust Knob Set
		GM-22	: Remote Shifter (ChromePlated)