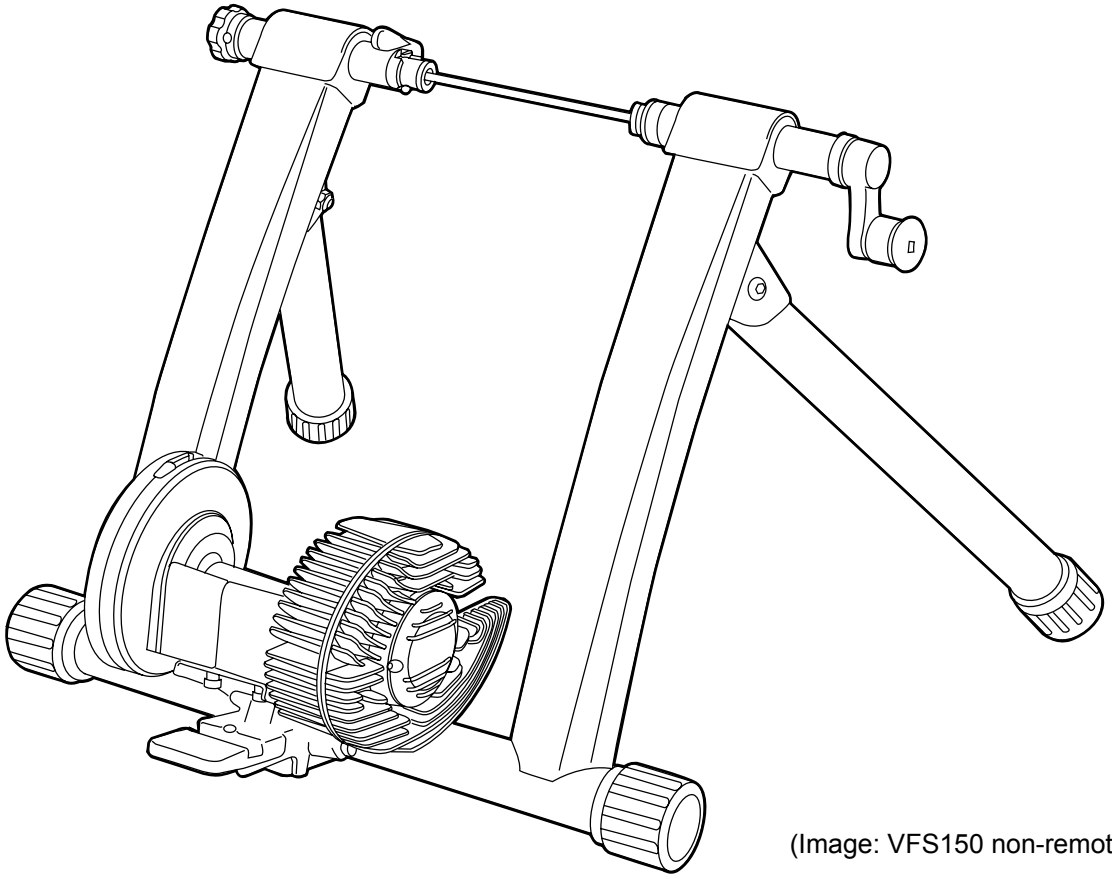
MINOURA VFS150

Indoor Bicycle Trainer instructions manual



(Image: VFS150 non-remote type)

Read this instructions carefully before use

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MINOURA

IMPORTANT NOTICE

- *For use with a normal 2-wheel bicycle only. Do not use a tandem, recumbent, or other.*

- *Use the supplied rear quick release skewer for maximum stability when your bike is equipped with a quick release skewer on the rear wheel.*
  Minoura is not responsible for any problem caused from using your own skewer.

- *Hub nut type rear wheel axle is also compatible with VFS150 in standard.*
  Remove the F-9 Grommet (Hub Nut Protector) from the Right Side Coupling (F-1) for better stability.

- *Fits wheel size between 24" and 27"/700c. To use 26x1.75" or smaller wheel, install the supplied Z-shaped Small Wheel Adaptor.*

- *Some assembly required. Use correct tools (10mm spanner & M4 hex wrench).*
  Tools are not supplied in the kit.

- *Use on flat and level floor or ground for your safety. Set the trainer on a large enough mat or towel to protect the floor and carpet from your sweat and stain.*

- *Adjust the roller pressure to the rear tire properly in order to maximize your tire life.*
  Tire and roller contact will eventually wear both your tire and the trainer roller.

- *If your trainer is the remote controllable version, check and adjust the remote shifter cable tension when you cannot set at L or H even though you turn the shifter lever.*

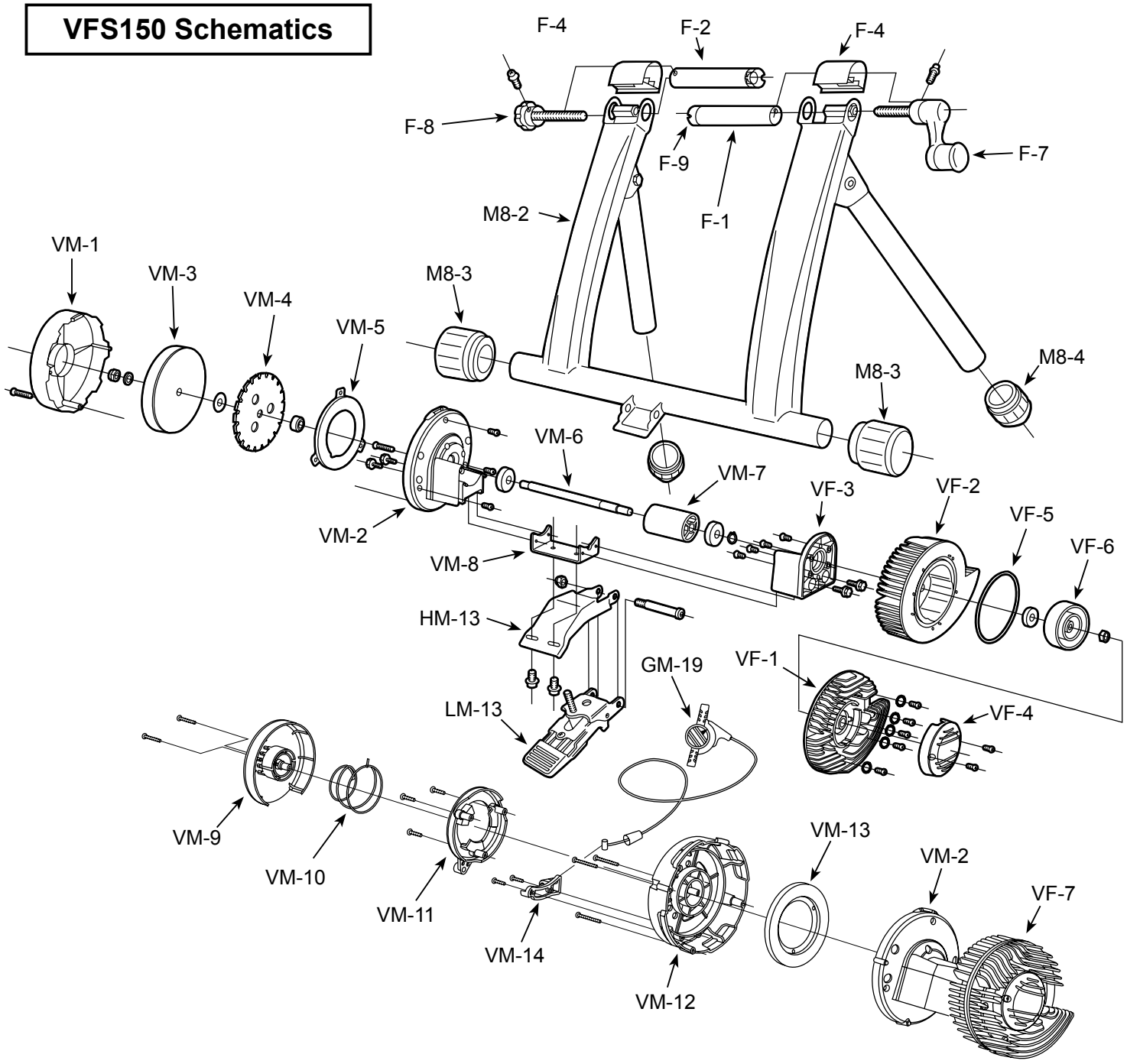
- *Touching the spinning wheel and/or any other moving parts while training may cause serious injury. Keep children and pets away from the trainer when in use.*

- *It is not possible to convert the non-remote resistance unit to the remote controllable one due to a difference in the inside mechanism.*

- *If you feel any strange noise, smell or oil leakage, stop using VFS150 immediately and contact the retailer where you purchased the VFS150.*

- *Any warranty will be void if you use VFS150 for other purpose than instructed.*
  Minorua offers 1-year limited warranty on the resistance unit and 5-year limited warranty on the frame from the date of your purchase for any problem caused by manufacturer's defect.
  Any damage or problem caused by transporting process is not covered under warranty.
  Any damage from shipping or moving must be made to the shipping company.
  Read enclosed "Minoura Limited Warranty Policy" card for more detail.

VFS150 Schematics



F-1	:	Right Side Coupling	VF-6	:	Fluid Cup
F-2	:	Left Side Coupling	VF-7	:	Fluid Assy
F-4	:	Coupling Cover	VM-1	:	Flywheel Cover
F-7	:	Hub Handle	VM-2	:	Flywheel Side Inner Housing
F-8	:	Wheel Position Adjust Knob	VM-3	:	Flywheel (1.5 kgs)
F-9	:	Hub Nut Protector (Grommet)	VM-4	:	Alloy Rotor
M8-2	:	VFS Main Frame	VM-5	:	Magnet (non-remote)
M8-3	:	Rubber Cap (38mm)	VM-6	:	Axle
M8-4	:	Rubber Cap (35mm)	VM-7	:	Drive Roller
GM-19	:	Remote Shifter (Red)	VM-8	:	Connection Plate
HM-13	:	Base Plate	VM-9	:	Remote Outer Cover
LM-13	:	Foot Pedal	VM-10	:	Spring
VF-1	:	Fluid Outer Cover	VM-11	:	Remote Ring
VF-2	:	Fluid Main Case	VM-12	:	Outer Housing
VF-3	:	Fluid Side Inner Housing	VM-13	:	Magnet (remote)
VF-4	:	Fluid Outer Cap	VM-14	:	Remote Bracket
VF-5	:	Oil Seal ring			

How To Setup Your VFS150 Trainer

Required Tools: 1 x 10mm Spanner
1 x M4 Hex Wrench

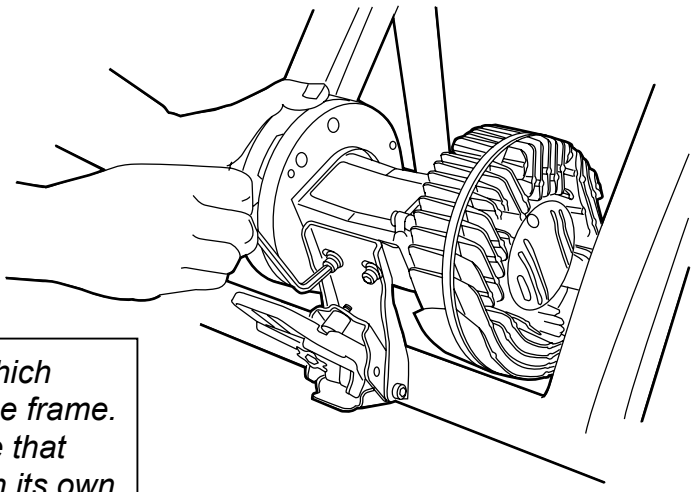
1. Replace your rear wheel quick release skewer to the supplied one.
Minoura guarantees the stability only when using the supplied skewer due to the coupling inner shape.

⚠ *You don't need the supplied quick release skewer if your wheel is a hub nut type. It's not possible to convert your wheel from the hub nut type to the quick release skewer type unless replacing the hub.*

⚠ *If your bike's rear wheel is a hub nut type, remove the Grommet (F-9) from the Right Side Coupling (F-1) for better stability.*

2. Install the VFS unit to the Base Plate (HM-13). (see Fig. A)

Attach the VFS unit onto the Base Plate. Adjust the VFS unit position to be almost center of the Base Plate, then tighten the bolts with M5 hex wrench.

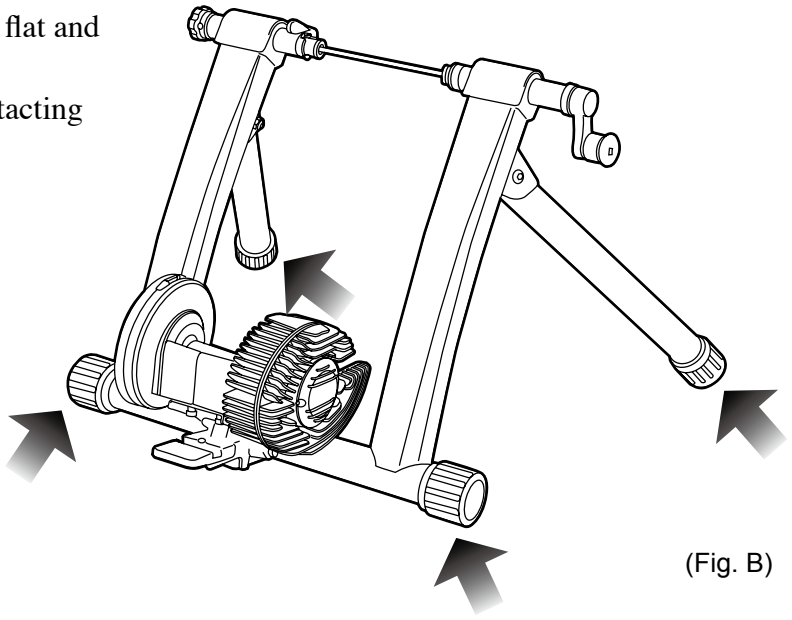


(Fig. A)

⚠ *Check the tightening of the pivot bolt which connects VFS unit and Foot Pedal to the frame. It should be tightend with correct torque that the VFS unit will come down slowly with its own weight when you release it. In addition, the VFS unit should move smoothly by operating the Foot Pedal.*
If the pivot bolt has been tightend too much, loosen a little with M4 hex wrench and 10mm spanner.

3. Fully open both legs and place VFS150 on a flat and level floor. (see Fig. B)
At this moment, make sure all 4 foot are contacting the floor at once to sit on the floor stable.

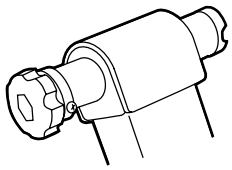
TIPS *If the both legs don't touch the floor at same time and if one leg has been slightly lifted up, pull another leg upward strongly to adjust the pivot part, then place the trainer on the floor again.*



(Fig. B)

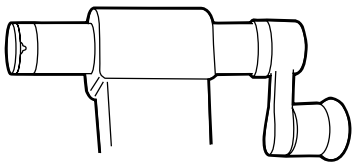
4. Place your rear wheel in between the couplings.

1) Turn the Wheel Position Adjust Knob (F-8) counter-clockwise to retract the Left Side Coupling (F-2). (see Fig. C)



(Fig. C)

2) Turn the Hub Handle (F-7) counter-clockwise to almost fully retract the Right Side Coupling. (see Fig. D)

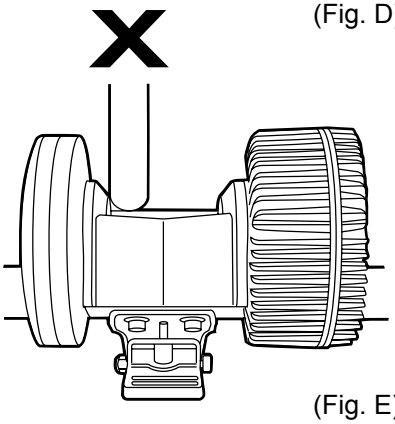


(Fig. D)

⚠ *The tire must be away from any plastic part and touches the Drive Roller only. (see Fig. E)*
Turn the Wheel Position Adjust Knob (F-8) to locate the tire in the center of the Drive Roller.

⚠ *Do not over-loosen the Hub Handle, otherwise the inside nut will have to be loosened and you cannot clamp the hub axle with proper torque.*

⚠ *Do not use Wheel Position Adjust Knob for clamping the hub axle. It must be done by the Hub Handle (F-7) only.*

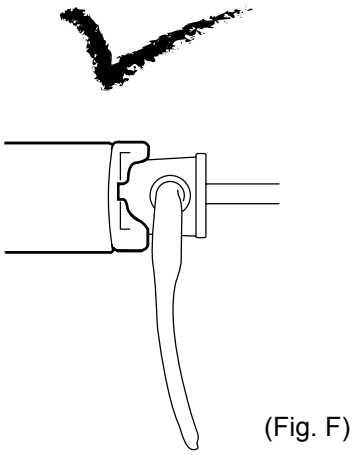


(Fig. E)

3) Insert the left side (quick lever side) skewer into the Left Side Coupling (F-2) first.
The quick lever shaft must be inserted into the cut-out on the coupling snugly to hold the bike stable. Turn the coupling to adjust the cut-out position. (Fig. F)

4) While keeping this position, slowly come down the bike to align the right side acorn nut to the Right Side Coupling (F-1).

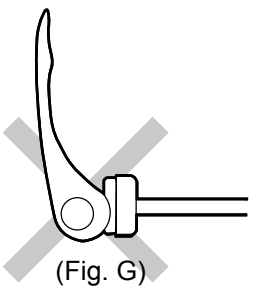
5) Tgihten the Hub Handle clockwise to clamp the rear wheel.
Turn 2 more rotations after you feel resistance and you see the frame starts opening slightly.



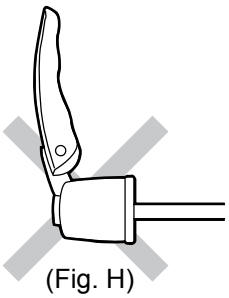
(Fig. F)

⚠ *Both left and right side couplings are designed to suit the supplied quick release skewer. Esepcially, the left side coupling must fit perfectly in the skewer head to get correct stability.*

Any skewer type which lever is located on the end of the axle (Fig. G) or the lever will not be bent over right angle (Fig. H) cannot be used on VFS150.



(Fig. G)



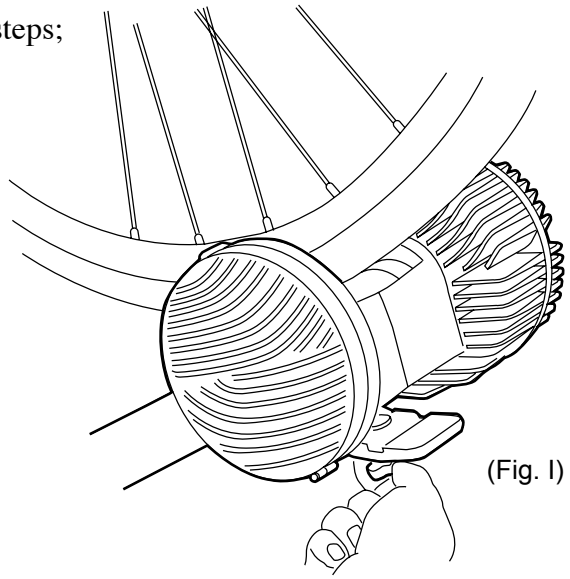
(Fig. H)

⚠ *Too tight setting will cause damage to both VFS150 and your bike frame.*
Too loose setting may cause the bike to come out of the trainer during use.

5. Contact the Drive Roller to the rear tire with the following steps;

1) Pull up the Foot Pedal to release the VFS unit lock.

2) Turn the Micro Adjust Knob clockwise until the roller comes close to the rear tire 2 - 3 mm. (see Fig. I & J)

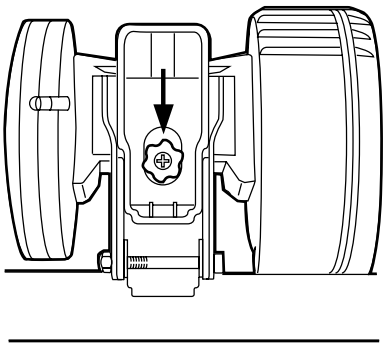


(Fig. I)

> ⚠ *Do not make the roller touch the tire. It will bring too much compression to the tire and will ocuur premature tire wear or burst problem.*

TIPS *If it's hard to tighten the knob bolt behind the Foot Pedal, lift up the VFS unit by hand then tighten the knob.*

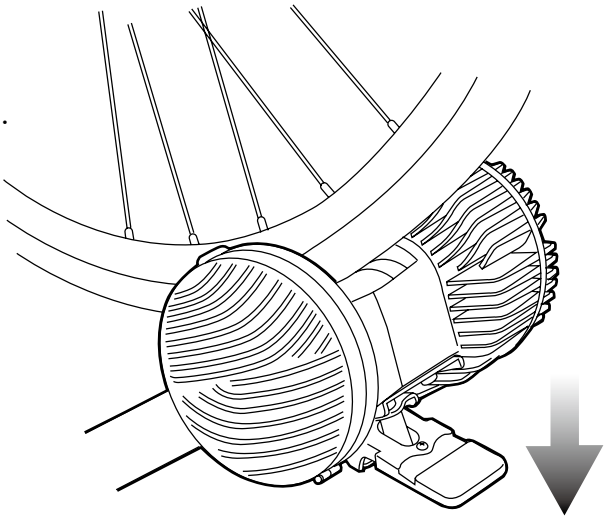
> ⚠ *If you cannot rotate the knob but the drive roller is still far away from the tire, the knob has been locked by the termination of the hex head of the inside bolt.*
>
> *Loosen the knob slightly and pull the knob for inserting the hex bolt head into the hex hole on the knob. (see Fig. J)*
> *While pulling the knob, tighten it until the hex bolt head sinks into the hole.*



(Fig. J)

3) Push down the Foot Pedal to contact the roller to the tire. (see Fig. K)
Check if the roller compresses the tire in proper depth.

4) To release the roller from the tire, just pull up the Foot Pedal.



(Fig. K)

> ⚠ *The best position is that the roller compresses the tire in the depth of 3 - 4 mm.*
>
> *Please note too much and too less roller pressure will bring premature tire wear. Keep correct roller pressure and maintain the air pressure in correct level before using VFS150.*

TIPS *Foot Pedal can repeat the same compression stroke by just pushing down the pedal.*

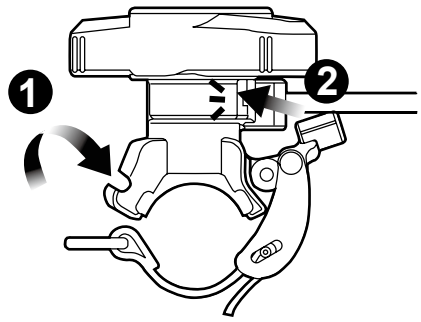
How To Adjust Resistance Level

VFS150 non-remote version doesn't have any resistance level adjustment. It is fixed at all times.
On the other hand, VFS150-R remote version features a convenient remote shifter lever. You can install it on the handlebar or stem, then you can control the resistance level without getting off the bike.

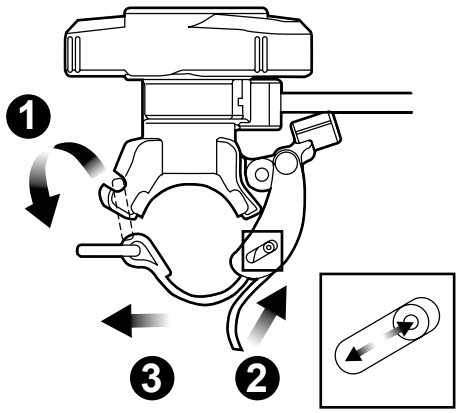
1. Wind the band around the handlebar and hook the metal ring to the gutter on the remote shifter base. (see Fig. L-1)

2. Flip up the lever to lock (see Fig. L-2). If it is loosened, adjust the band tighter as per instructed in the following section.

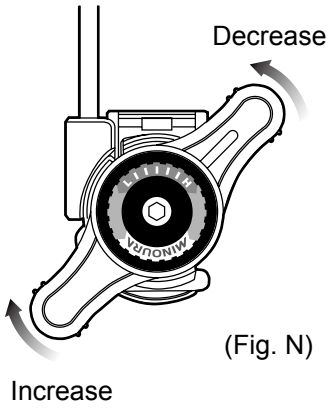
3. The soft fabric band is pre-adjusted to fit normal 22mm diameter handlebar.
If you need to mount onto an oversized or specially shaped handlebar or stem, adjust the band (see Fig. M).
At this moment, we suggest you to slide the guide pin downward (see the column) to loosen the band for easier work.



(Fig. L)



(Fig. M)

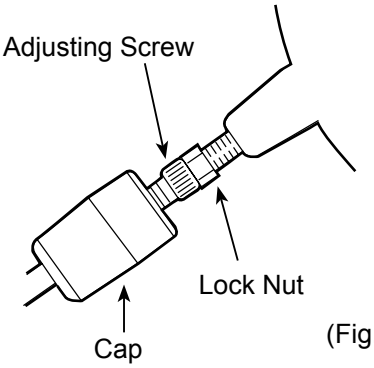


(Fig. N)

4. To increase the resistance, twist the lever toward "H". To decrease the resistance, twist the lever towawrd "L". (see Fig. N)
You can choose from 7 different levels to suit your desired workout level.

Why My Remote Shifter Doesn't Work Properly?

You may have a shifting problem that you cannot set at L or H position properly due to the lengthened inner cable.
To fix this problem, follow the steps to adjust the initial cable tension;



(Fig. O)

1. Set your remote shifter at "H" position and remove the shifter from your handlebar, then straighten the cable as much as possible.

2. Pull out the plastic Cap on foot of the remote cable. (see Fig. O)

3. Hold the inside Adjusting Screw and push it toward the shifter, then adjust the Lock Nut toward the VFS resistance unit until the nut touches the housing to set the cable tension properly.

4. Install the Cap again.

How To Use Small Wheel Adaptor

Required Tools: 1 x 10mm Spanner
1 x M5 Hex Wrench

If you wish to use the tire sized 26 x 1.75" or smaller, you need to install the supplied Z-shaped "Small Wheel Adapter" between Base Plate and Mag unit to raise up the roller height.

The direction of 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 even if you install the adaptor, make sure you have been installed in correct direction.

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