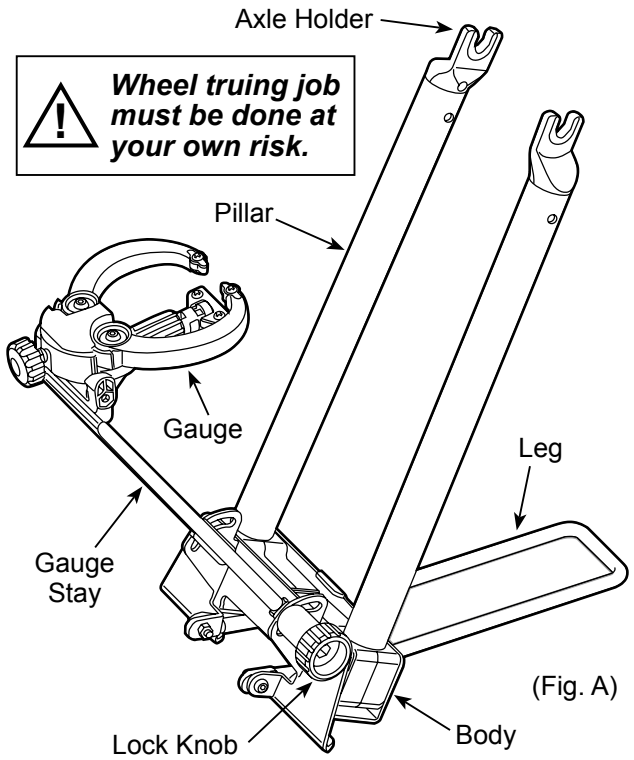


(Fig. A)

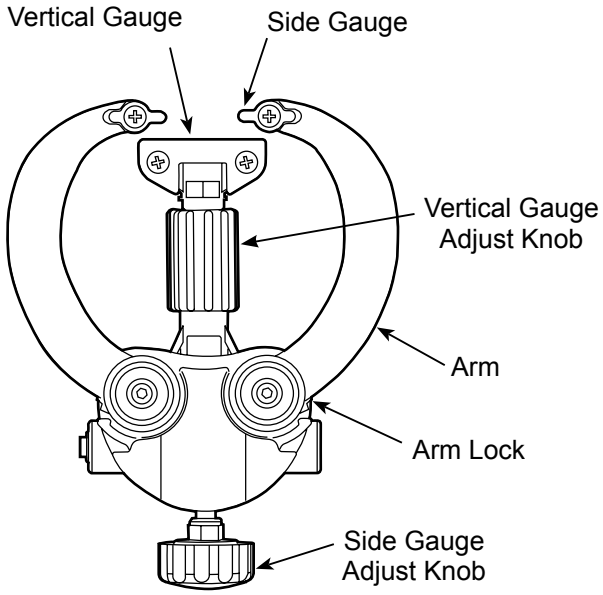
Thank you for choosing the MINOURA ***TRUE-BASE*** portable wheel truing stand.
True-Base holds a bicycle wheel on top of the pillars for helping you to maintain the wheel.
The gauges that check vertical and horizontal movement of the wheel are intuitive and easy to use.
True-Base folds down completely for easy trans-port and compact storage.

Please read this instructions manual carefully before use and keep handy at all times for future references.

⚠ Important Notes

- ***Do NOT use True-Base for any purpose other than instructed such as displaying bike on it.***
- ***Both right and left side pillars move together for placing the wheel in the same position whatever the hub width is, but it's not 100% perfect so we recommend you to use an optional wheel dishing tool together for much more precise adjustment. We don't guarantee any result by using this stand.***
- ***Axle Holder is a fixed type. Depending on the hub width, you may have to slightly bend Axle Holder by tightening the wheel quick release skewer firmly. If the tightening skewer power is not enough, either hub side will be lifted up that makes the wheel becomes angled and you cannot expect correct result.***
- ***Push down the wheel to set it in the deepest position on the Axle Holder when you tighten the quick release skewer.***
- ***T-shaped gauge for checking the prior gauge center position doesn't come with the kit. Purchase sseparately if necessary.***
- ***Dishing Tool and Nipple Wrench are necessary for maintaining the wheel but they are not included in this kit. Purchase them separately at your local bike shop.***

Components



(Fig. B)

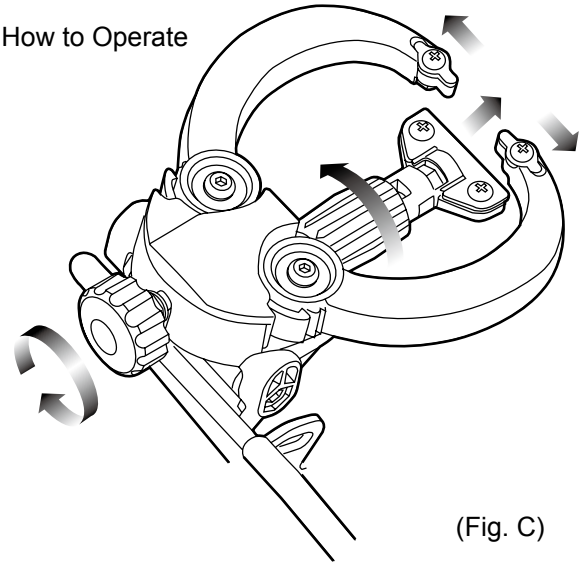
• PILLARS

Both right and left side Pillars are connected in the body so they will move together at the same time. You should hold both Pillars with both hands when opening or closing them.

• AXLE HOLDER

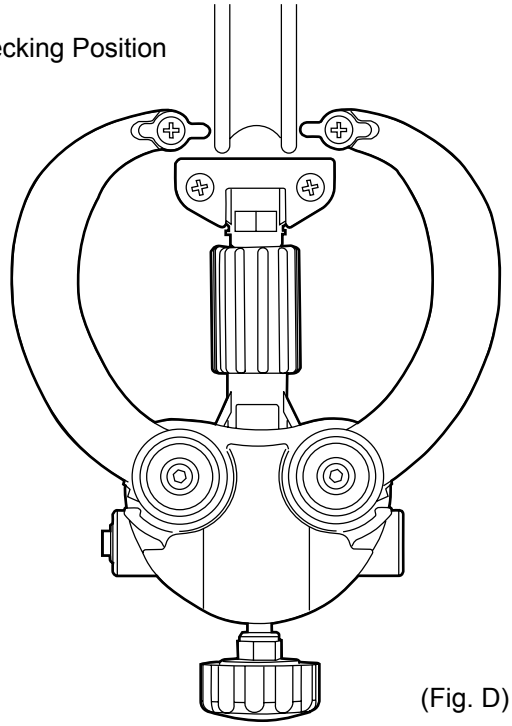
Be sure that Axle Holder is a fixed type, not angle adjustable.
It is crucial to set the wheel into the deepest position of the Axle Holder by pushing down the wheel when setting up the wheel on True-Base to get better result. If one side has been lifted up due to bad installation, the wheel won't become symmetrical.

How to Operate



(Fig. C)

Checking Position



(Fig. D)

• VERTICAL GAUGE

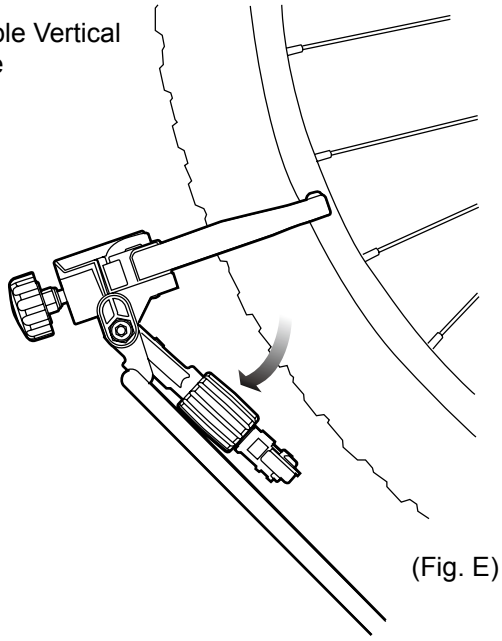
Vertical Gauge is for checking the vertical movement of the wheel. When the rotating wheel comes in contact with the Vertical Gauge, you will hear a scratching sound.

To adjust the gauge position, rotate the red barrel type Vertical Gauge Adjust Knob. (see Fig. C)

Vertical Gauge should be positioned 1 - 2 mm away from the rim. (see Fig. D)
If the movement is so heavy, you should place the gauge farther, then set it closer gradually as the adustment is being done.

If you mount a wheel with tire for just checking the horizontal movement only, you can fold down the Vertical Gauge manually. (see Fig. E)

Foldable Vertical Gauge



(Fig. E)

The metal tip on the Vertical Gauge can be removed by loosening two screws if you don't wish to scratch the soft carbon rim surface.
However, we recommend you keep the metal tip in contact at all times for getting clearer sound.

Vertical Gauge may be twisted slightly.
It must be parallel to the rim, and both right and left side of the rim edge must touch Vertical Gauge at same time.
If it has been twisted and you see some gap on either side between the gauge and the rim edge, pinch the gauge only (not holding the barrel knob) then turn it.

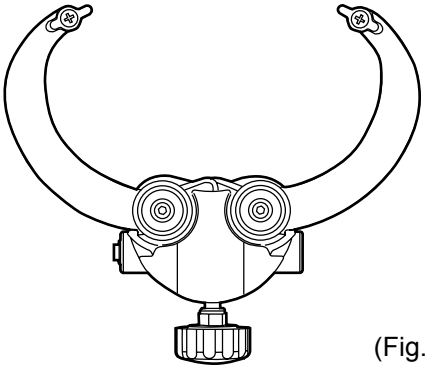
• SIDE GAUGE

Side Gauge is for checking the horizontal movement of the wheel. When the rotating wheel comes in contact with the Side Gauge, you will hear a scratching sound.

To adjust the opening of Side Gauge, rotate Side Gauge Adjust Knob, then both Arms will move together at the same time. (see Fig. C)

Side Gauge should be positioned 1 - 2 mm away from the rim side wall. (see Fig. D)
If the movement is so heavy, you should place the gauge farther, then set it closer gradually as the adustment is being done.

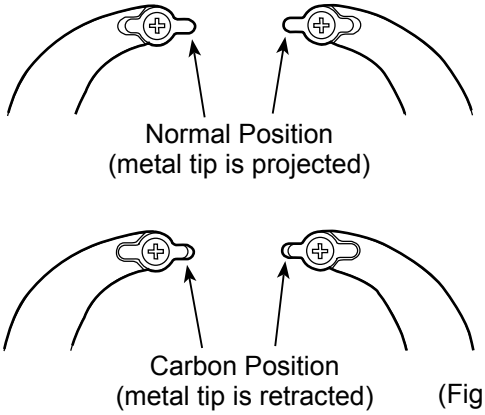
If you already set the best opening size of the Side Gauge to your rim but the wheel has a tire, you can open the Arm manually for quicker installation.



(Fig. F)

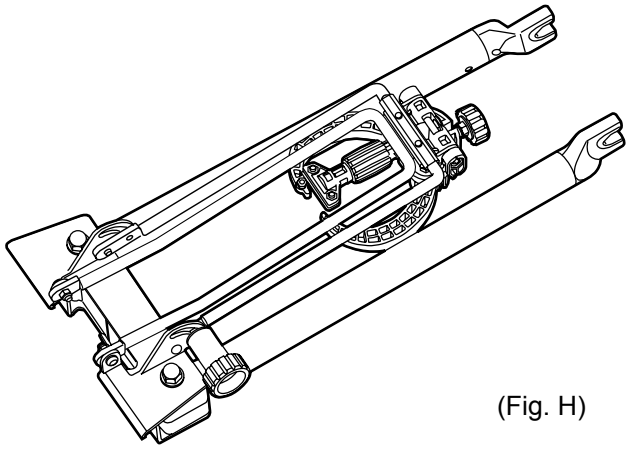
To do so, hold the Arm then open it until it is locked at the widest position. (see Fig. F)

The metal tip of the side gauge can be retracted by flipping the tip metal piece if you worry about damage to the side of your rim. (see Fig. G) However, the contact sound will have to become smaller so listen more carefully.



(Fig. G)

How To Fold Down



(Fig. H)

True-Base is completely foldable for easier transportation and compact storage.
To fold down, follow the steps;

1. Shut the Side Gauge as narrow as possible by turning the knob.
2. Loosen the Lock Knob.

3. Close the Pillars (gently push together).

4. Fold the gauges downward and push toward the Pillars.

5. Flip up the Leg until it touches the Gauge Stay.

6. Tighten the Lock Knob.

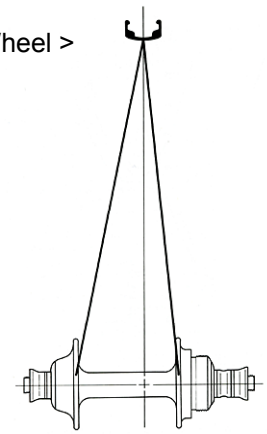
Be careful not to pinch your fingers between the body, stay and leg.

Do not try to store the gauge between the pillars.
If strong sideward shock is applied, the plastic gauges should be broken.

About Offset Wheel Setting

At first, you should understand that you should fix the vertical movement prior to the horizontal movement, especially on the rear wheel because of its unique wheel system named ***"Offset"***.

< Offset Wheel >



(Fig. I)

Tensioning the front wheel is much easier than the rear because it's symmetric. Rear wheel tensioning requires Offset Tensioning.

The rear wheel has a different spoke angle pattern when looking at it from behind. (see Fig. I)
A rear hub is not symmetrical to the wheel. Flanges can be far from center. Because the rear hub must have extra space for the set of transmission gears, you will need to true using Offset Tensioning.

In offset wheel, the torque works mostly only to the right side (gear side) spokes. Because right side spokes should be assembled more vertically than left side.
So you should understand that right side spoke tension is more important than left side spoke's one in this offset assembling.
Well adjusted right side spokes can keep your wheel stable in the future. Left side spoke tension is just a help.

Understand that the nipple should not be loosened at any time. Nipples are made from softer alloys or brass and are prone to stripping easily.

You must use a correct size spoke wrench which fits the nipples perfectly, especially when you use light alloy nipples on your wheel. If you use wrong size one, the nipple will become round easily and you cannot continue your work any more.

How To Fix Vertical Movement

The vertical movement within 3 mm may not cause any troubles. But if you want to be it as zero as possible for smoother ride, you should try the following process again and again.

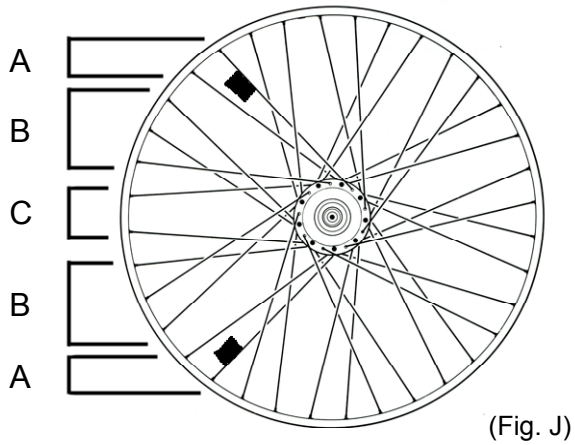
Be sure, in this case, you should tighten both side of the nipples equally.

1.
You set the wheel on the True-Base and see the Vertical Gauge.
Put the tip of the Vretical Gauge close to the surface of the rim.

2.
Rotate the wheel slowly, and check the vertical movement. Do not spin fast.

3.
Attach tapes to two spokes; one is in the beginning and another one is in the ending of vertical movement.

4.
Make three (3) groups of spokes between your tape markers as below;



(Fig. J)

Group-A: 3 or less spokes in the beginning and in the ending of vertical movement.

Group-B: 3 or less spokes between Group-A, except for the center spoke.

Group-C: The center 1 or 2 between the tapes.

5.
If the rim moves to outward, tighten both side nipples.
If the rim shakes inward, do NOT try to loosen the

nipples. Tighten both far side nipples.
This is because the nipples are made of soft material, so its thread can be broken easily by loosening.

6.
Tighten the spokes as below;

- Group-A nipples about 1/8 turns
- Group-B nipples about 1/4 turns
- Group-C nipples about 1/2 turns

Then check the vertical movement again with rotating the wheel slowly.

If the wheel moves yet, continue the process again.

⚠ ***If you hear a strange sound or see narrow metal "lines" or residue, your nipple will fail soon.***
Do NOT apply any lubricant to quiet the sound. Put a new nipple on immediately.

⚠ ***Do NOT tighten the spoke more than 1/2 turns at one time. Wheel truing must be done step by step. Otherwise, you will loose the spoke tension balance completely.***

How To Fix Horizontal Movement

The horizontal movement within 2 mm may not cause any troubles. But if you want to be it as zero as possible for smoother ride, you should try the following process again and again.

1.
You set the wheel on the True-Base and see the Side Gauges.
Put the tips of them close to the surface of the rim side wall. Do not make them touch the rim.

2.
Rotate the wheel slowly, and check the horizontal movement. Do not spin fast.

3.
Attach tapes to two spokes; one is in the beginning and one is in the ending of horizontal movement.

4.
Make three (3) groups of spokes between your tape markers as shown in Fig. J;

Group-A: 3 or less spokes in the beginning and in the ending of horizontal movement.

Group-B: 3 or less spokes between Group-A, except for the center spoke.

Group-C: The center 1 or 2 between the tapes.

5.
If the rim moves to right, tighten the left side nipples. Do NOT loosen the right side nipples.
This is because the nipples are made of soft material, so its thread can be broken easily by loosening.

6.
Tighten the spokes as below;

- Group-A nipples about 1/8 turns
- Group-B nipples about 1/4 turns
- Group-C nipples about 1/2 turns

Then check the horizontal movement again with rotating the wheel slowly.

If the wheel moves yet, continue the process again.

⚠ ***If you hear a strange sound or see metal "lines" or residue, your nipple will fail soon.***
Do NOT apply any lubricant to quiet the sound. Put a new nipple on immediately.

⚠ ***Do NOT tighten the spoke more than 1/2 turns at one time. Wheel truing must be done step by step. Otherwise, you will loose the spoke tension balance completely.***

There are several ways to true the bike wheel. Above is just one example and you don't have to follow our way.
You should ask well-educated mechanics to get more effective techniques.

Limited Warranty Policy

1. Only the original user who purchased this True-Base in brand-new and unopened condition at an authorized Minoura dealer, authorized internet retailer or authorized mail order house (hereafter "Original User") is covered under the Minoura Warranty Service Program (hereafter "Warranty Service").

2. Any used or new True-Base, either purchased or given through a shop, internet auction site or person-to-person will not be covered under Warranty Service, except under special circumstances to be determined by Minoura.

3. Original User must keep the original sales reciept and must present a photocopy of the reciept together with a claim report to obtain Warranty Service.

4. The warranty period shall start from the date of purchase. If the reciept is not presented, Minoura reserves the right to extend or deny Warranty Service.

5. All warranties will be void if the True-Base is damaged due to user's abuse, disassembly, unauthorized alteration or midification, or used in any way not intended as described in the instructions manual.

6. Only issues caused by manufacturer's defects will be covered to all users at Minoura's expense. The period expires in a maximum of 7 years after the last production.

7. Minoura may offer paid service for in or out of warranty products that may include, but is not limited to, repair, replacement and shipping expenses.

For more detailed information, refer both the attached "MINOURA LIMITED WARRANTY POLICY" card and our web site (www.minoura.jp). Web can offer you the latest and more correct information.

For More Information...

** Please contact the shop first where you purchased True-Base.*

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Fax: +81-584-27-7505
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URL: www.minoura.jp

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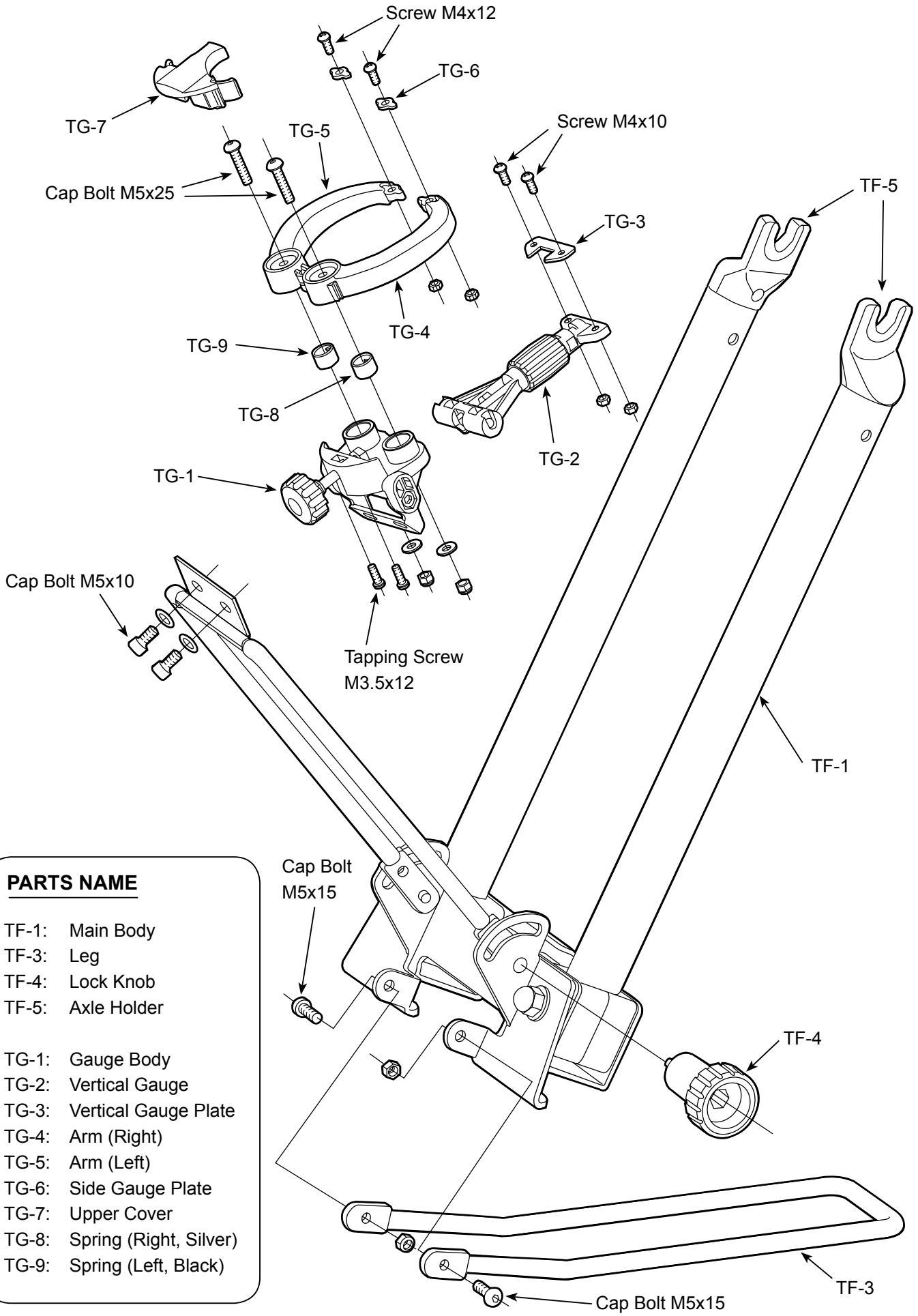
Phone: 1-510-538-8599
Fax: 1-510-538-5899
Email: support@minourausa.com

*** For countries not listed, please see our web site at www.minoura.jp to find the Minoura distributor in your country and contact them for service.*

Made in Japan

True-Base Resolution Diagram

MINOURA



PARTS NAME

TF-1: Main Body
TF-3: Leg
TF-4: Lock Knob
TF-5: Axle Holder

TG-1: Gauge Body
TG-2: Vertical Gauge
TG-3: Vertical Gauge Plate
TG-4: Arm (Right)
TG-5: Arm (Left)
TG-6: Side Gauge Plate
TG-7: Upper Cover
TG-8: Spring (Right, Silver)
TG-9: Spring (Left, Black)