MINOURA bicycle storage stand **BikeTower20D** instructions manual

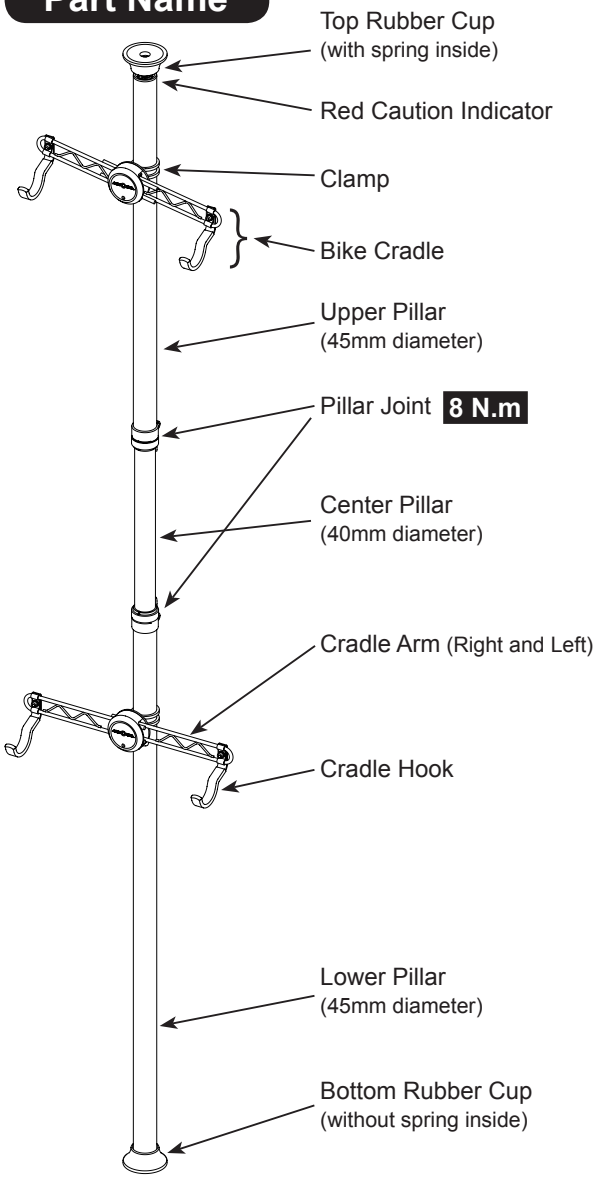
(ver.1.0 2017/8)

Thank you for choosing the Minoura **BikeTower 20D**. BikeTower is a very convenient and easy to set up bike storage stand that can be installed in any room where the ceiling height is between 2.1 and 2.7 meters high.

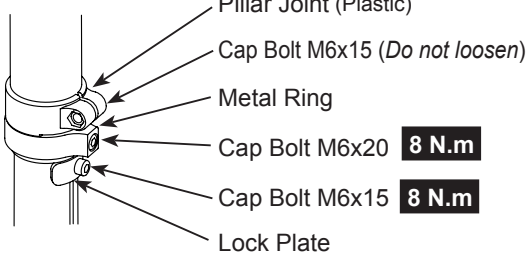
BikeTower comes with two bike cradles, and it can be expanded up to 4 bikes and other items by installing optional bike cradles and attachments.

Read this instructions manual carefully before use for your safety, and keep on hand for future reference.

Part Name



[Pillar Joint]



Recommended Tightening Torque = 8 N.m

Important Notes

- ***Use the supplied plastic tie to hold the pillar to the ceiling or the wall to avoid the stand from toppling over if the pillar length was shortened if there was an issue with the locking bolt.***
  Minoura is not responsible to any trouble if you don't use this plastic tie correctly.

- ***For standard 2-wheel bike only. Not for use with tandems or long wheel base bicycles.***

- ***Each bike cradle is rated to hold up to 25 kgs.***
  If mounting heavy bikes, check the bolts often to make sure they are not loose.

- ***Check to make sure the Pillar Joint has remained secure by pulling down the Upper Pillar after tightening the Pillar Joint Bolt and the Lock Plate Bolt.***
  If the pillar has moved after tightening, discontinue using and contact your dealer or Minoura directly. You may need to replace the metal ring of the Pillar Joint.

- ***The pillar is supported by the internal spring applying pressure to the ceiling.***
  Make sure that the pillar comes in contact with a stud or other reinforced area of the ceiling otherwise the pressure may cause a break through on dry wall or other non-supportive material.

- ***Adjust the pillar length correctly. If the red plastic appears beneath the Upper Rubber Cup, it means the pillar is not adjusted properly (too short).***

- ***Do not install the pillar upside down.***
  NEVER use BikeTower horizontally. It is for vertical use ONLY.

- ***The pillar must be completely vertical, and not at any angle. Failure to do so will cause the stand to fall.***

- ***The rubber cap material may leave a mark on some ceilings or floors.***
  We recommend placing a small piece of fabric or paper between the rubber cup and the ceiling. Do not use a slippery material.

- ***The coating on the cradle hook may leave a mark on your bicycle frame, especially in light colors.***
  We recommend wrapping a piece of bar tape on the hook where it comes in contact with the frame.

- ***Depending on the bike size, you may have to change the clamp position from the fatter Upper or Lower Pillar to the narrower Center Pillar.***
  In this case, install the supplied plastic shim between the clamp and the pillar.

- ***The pillar is just a single pole so it's easy to turn. Do not place any fragile items or sharp edge articles around the pillar.***

- ***This product is subject to change without prior notice for quality and safety improvements.***

How To Setup

Measurement → Temporally Setting → Adjusting Length → Setting → Check → Fix

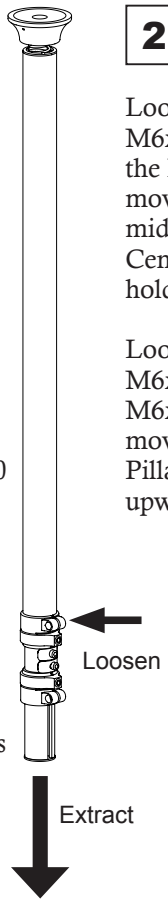
Required Tool : 5mm Hex Wrench

1

The Upper and Lower Pillars come separated.
The Center Pillar is retraced inside the Upper Pillar.

Loosen the M6x15 bolt and two M6x20 bolts of the upper Pillar Joint to extract the Center Pillar.

After extracting, tighten the bolts temporally.

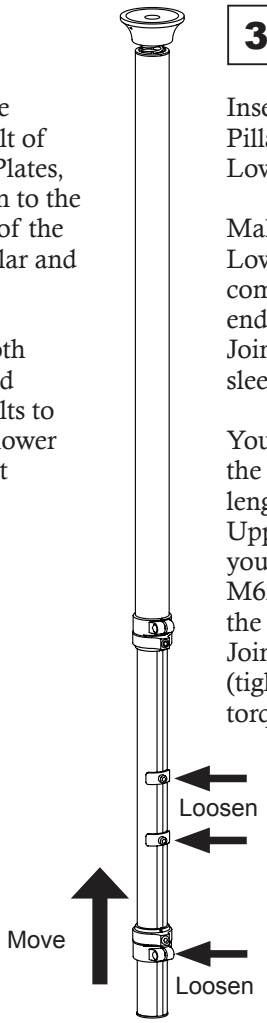


(Fig. A)

2

Loosen the M6x15 bolt of the Lock Plates, move them to the mid zone of the Center Pillar and hold.

Loosen both M6x15 and M6x20 bolts to move the lower Pillar Joint upward.



(Fig. B)

3

Insert the Center Pillar into the Lower Pillar.

Make sure the Lower Pillar comes until the end of the Pillar Joint plastic sleeve.

You will adjust the total pillar length at the Upper Pillar, so you tighten the M6x20 bolts of the lower Pillar Joint firmly (tightening torque = **8 N.m**).

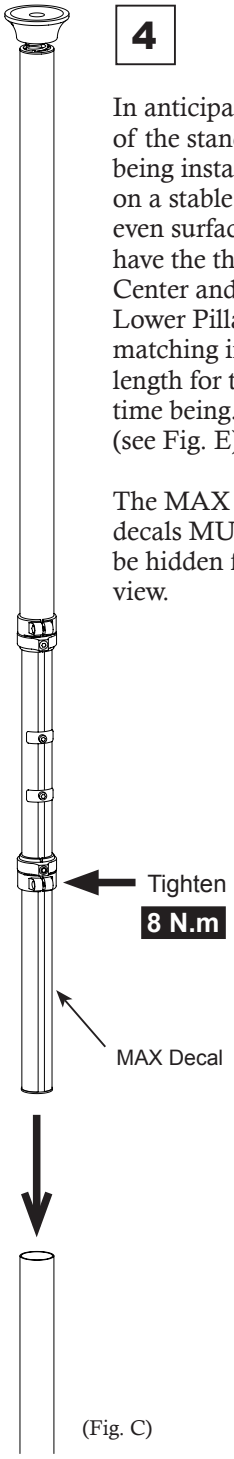
After this point there is no need to touch the Lower Pillar any longer.

Assembly is now complete and you will move on to adjusting the pillar length to match the height of your ceiling.

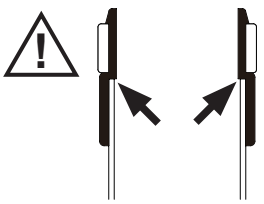
4

In anticipation of the stand being installed on a stable and even surface, have the the Center and Lower Pillars matching in length for the time being. (see Fig. E)

The MAX decals MUST be hidden from view.

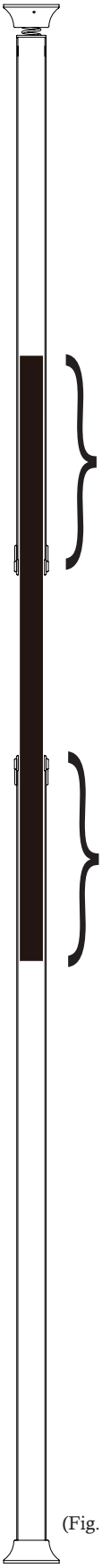


(Fig. C)

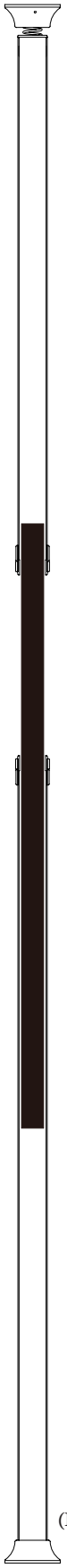


(Fig. D)

The Lower Pillar must be fully inserted into the Pillar Joint. If some clearance remains, the pillar may be too short and could fall down, causing a serious accident.



(Fig. E)



(Fig. F)

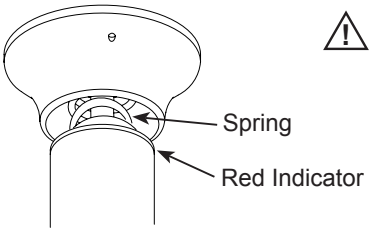
HINT

You should know the Lower Pillar length is 1.2 meters.
Use this fact as a scale to measure the ceiling height from the floor.
For example, if the ceiling is just twice of the Lower Pillar, it's 2.4 meters.

The Center Pillar is 90cm long, and it should be inserted into both Upper and Lower Pillars symmetric to expect the maximum durability of the total pillar.
For example, if the ceiling height is 2.4 meters, you should set the Center Pillar is 25cm sunk in the Upper Pillar (65cm remaining). This will avoid the troublesome re-setting of the pillar length after setting up the stand.

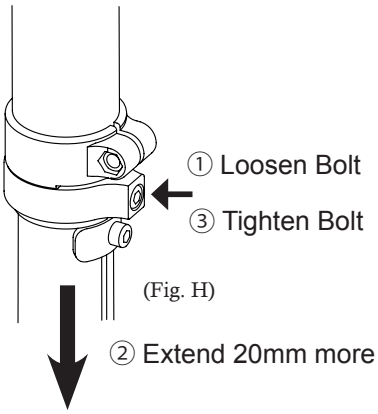
5 You will adjust the pillar length to match to your actual ceiling height.
Make sure the Rubber Cup with spring is ceiling side (see Fig. G). Do NOT set the cap upside down.

Loosen the M6x20 bolt of the metal ring on the upper Pillar Joint. Do not loosen any other bolts. Now the pillar will move up and down freely.



(Fig. G)

6 Stand the pillar and extend the Upper Pillar toward the ceiling.
When the Top Rubber Cup reaches the ceiling, tighten the M6x20 bolt temporally to fix the pillar length.
This is the actual length between the floor and the ceiling without compressing the spring.



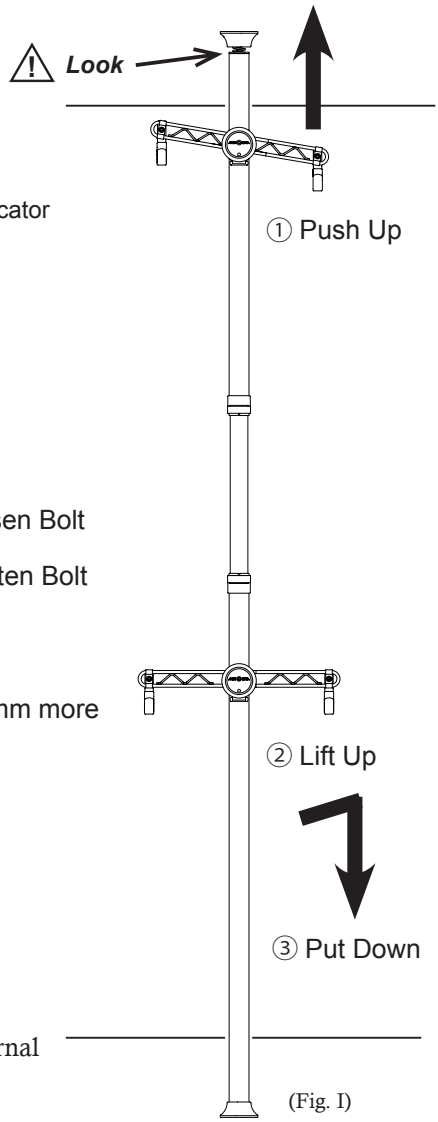
(Fig. H)

7 Remove the pillar and lay it down on the floor.

8 Loosen the temporally tightened M6x20 bolt, extend the Upper Pillar **20mm more**, and tighten the bolt firmly at **8 N.m**.
Now the final pillar length is fixed.

9 Loosen the M6x15 bolt of the lower Lock Plate, slide it along the groove until it reaches the Lower Pillar, then tighten the bolt firmly at **8 N.m**.
This will work as a stopper to keep the pillar in place and at the proper length so it won't fall down. Set it at the upper and lower Lock Plates.

Tightening Torque
8 N.m



(Fig. I)

10 Now the stand is ready to be set up in your room. (see Fig. I)

1) Place the Top Rubber Cup against the ceiling then push up to compress the internal spring.
2) While keeping the spring compressed,
3) Slide the Lower Pillar and align it correctly while bringing it in contact with the floor.

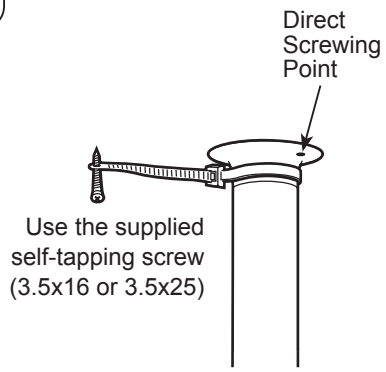
⚠ ***If you see red plastic part beneath the Top Rubber Cup when you setup the pillar, it's the warning sign that the pillar is not extended enough. Remove from the ceiling, adjust the pillar length properly, and try to install again.***

11 Grab the Upper Pillar and try to pull down in order to confirm if the Pillar Joint is securely locked.

⚠ ***This confirmation must be done. Minoura is not responsible for any damage or injury if this step is not followed. If the stand has been set up properly but the remains too short, contact your dealer and request replacement parts.***

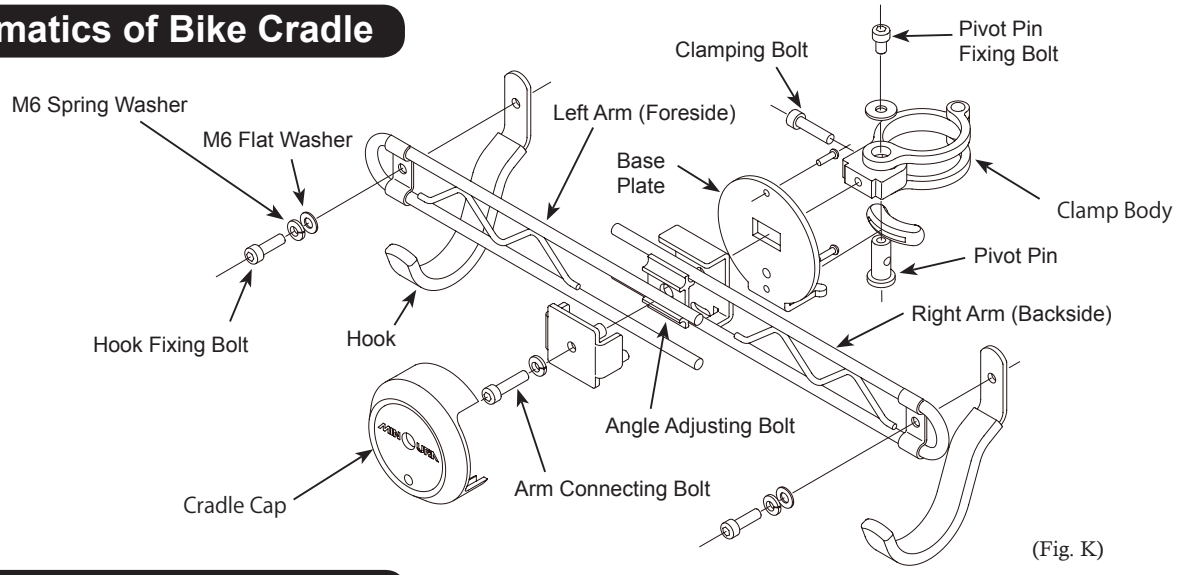
12 To avoid any chance of the pillar falling, hold the Upper Pillar to the ceiling or the wall with the supplied plastic tie, or directly hold the Top Rubber Cup to the ceiling by screwing at the designated point. (see Fig. J)
This step is mandatory and critical that you complete.

Wrap the tie around the pillar just beneath the Top Rubber Cup and tighten it, put the screw in the hole on the tip of the tie, then screw it to the ceiling or wall.
Make sure the area you choose to place the screw has a solid backing such as a stud or similar. Do not install into dry wall only.



(Fig. J)

Schematics of Bike Cradle



(Fig. K)

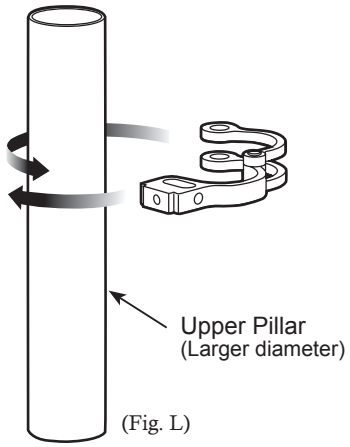
How To Install Bike Cradle

1 The clamp body is pre-assembled on each bike cradle. You need to install it to the pillar. Follow the steps below;

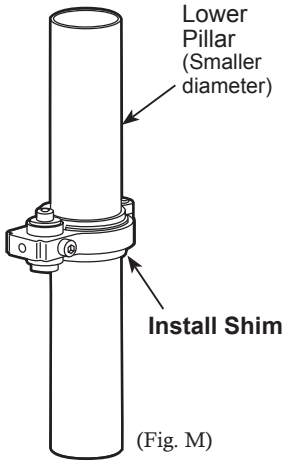
⚠ ***Make sure you don't completely remove the Arm Connecting Bolt. If you do the part becomes unusable. Just loosen it without removing it when necessary.***

⚠ ***The clamp is universal with no specific direction. But the pivot pin MUST come from the bottom. If you don't, you will be unable to tighten the bolt with your hex wrench.***

2 Remove the Clamping Bolt from the side, the Pivot Pin Fixing Bolt from the top and the Pivot Pin from the bottom in order to enable the opening of the clamp arms. (see Fig. L)



(Fig. L)



(Fig. M)

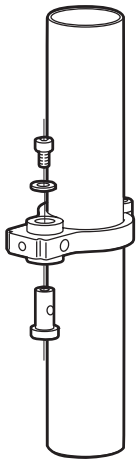
(Bike Cradle is deleted in this section for explanation.)

⚠ ***When installing the clamp band to the smaller diameter Lower Pillar, you must put the Plastic Shim between the clamp band and the pillar as a spacer. Make sure the dual ribs are located on the single arm side. (see Fig. M)***

3 Put the Pivot Pin through all 3 holes on the clamp band from bottom side, and screw the Pivot-Pin Fixing Bolt with a flat washer temporally. (see Fig. N)

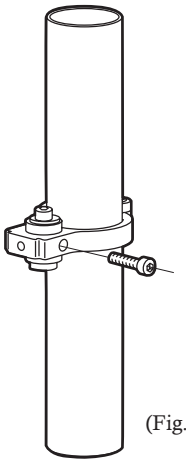
⚠ ***Do not install the Pivot Pin from the top. You will not be able to use the hex wrench.***

Do not tighten the Pivot Pin Fixing Bolt firmly yet. If you tighten to much, the next step will become difficult.



(Fig. N)

4 Turn the Pivot Pin to align the thread hole to the side hole on the Clamp Band. Screw the Clamping Bolt into the Pivot Pin. (see Fig. O)



(Fig. O)

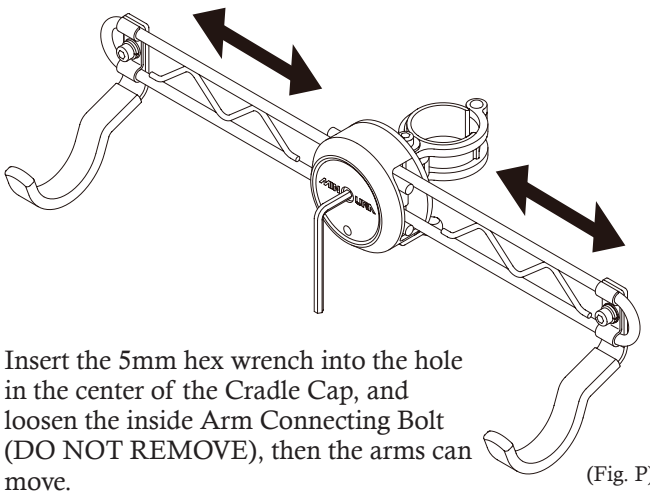
5 Tighten the Clamping Bolt first, then tighten the Pivot Pin Fixing Bolt firmly (**8 N.m**).

6 Install the hook to the Cradle Arm with the bolt.

Adjusting Cradle Width & Angle

The Bike Cradle Arm is size adjustable between 325mm and 415mm (the distance of the Hook Fixing Bolts) and also angle adjustable +/- 10 degrees in order to fit to various types of bike frame as perfectly as possible.

How To Slide Cradle Arm



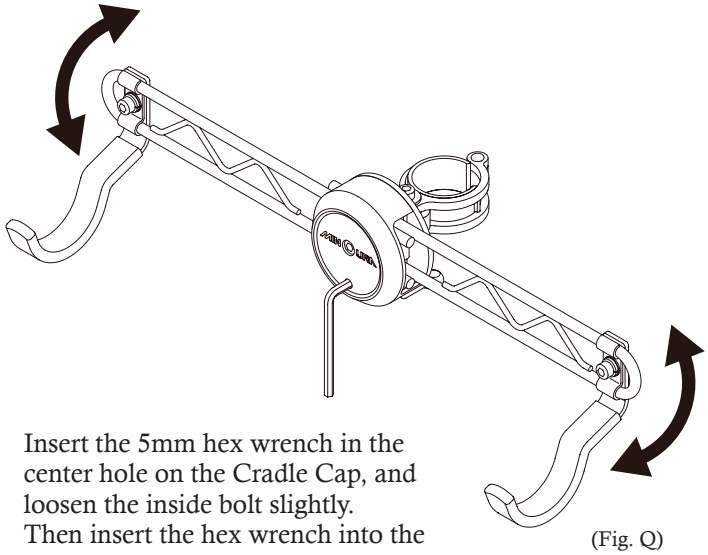
Insert the 5mm hex wrench into the hole in the center of the Cradle Cap, and loosen the inside Arm Connecting Bolt (DO NOT REMOVE), then the arms can move.
After adjustment, tighten the bolt firmly.

(Fig. P)

⚠ ***Do NOT try to remove the Cradle Arm. Do not over-pull the arm until the arm end will become hidden in the brackets which hold the arm.***
Once you disassemble the Bike Cradle, you will have to remove it from the pillar and remove the Cradle Cap for re-assembly.

⚠ ***Do NOT try to slide the arm while the bike is on the cradle. The bike may fall off when the arm has come out.***

How To Adjust Cradle Angle



Insert the 5mm hex wrench in the center hole on the Cradle Cap, and loosen the inside bolt slightly.
Then insert the hex wrench into the lower hole, and loosen the inside bolt.
Now the cradle is ready for ajusting its angle.
After adjustment, tighten both bolts firmly.

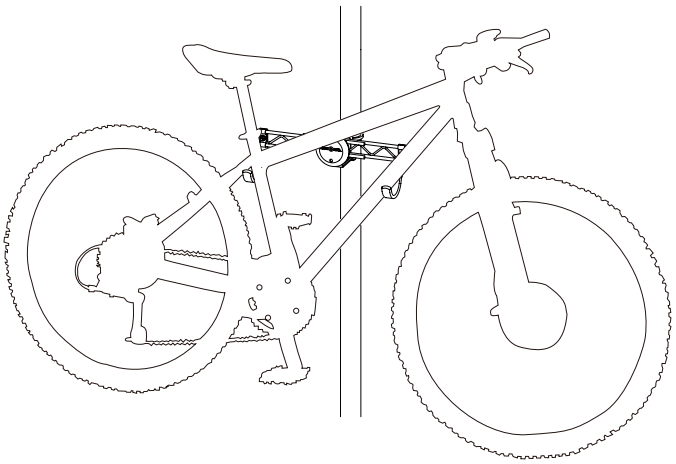
(Fig. Q)

How To Mount Bike

To mount a bike on the cradle, place the top-tube on the hooks.
Usually, you hold the top-tube by both hooks, but if the bike frame design is specially sloping, you should set either hook under the seat-tube to keep the bike from sliding off. (see Fig. R)

⚠ ***Setting the front end to higher than the rear of the bike may cause the wheel to turn and possibly chip or damage the frame from components touching. Minoura recommends keeping the front end lower if possible or using a strap to secure the wheel to the frame or stand to avoid such accidents.***

⚠ ***The hook material may stain on your bike frame, especially in light color such as white, depending on the top finish condition.***
We recommend placing a piece of bar-tape between the hook and the frame or wrapping the hook with bandage in order to avoid direct touching each other.



(Fig. R)

Warranty Period

Minoura offers **1-year limited warranty** to this product from the date of your purchase.
Any natural wear and the problems caused by miuse or unapproved modification will not be covered by this program.
For more details, read the enclosed **Minorua Limited Warranty Policy** card in the kit.
Also please regularly check our Minoura web site for the latest information.

Contact

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