INTEGRATED SEAT POST&TRI-BAR CUTTING GUIDE

Congratulations on your purchase of a Giant Integrated Seat Post (ISP) frame. ISP (FIG. 1) represents the latest achievement in design and engineering, but also requires special attention. While Giant Bicycle engineers use the most durable and lowest maintenance materials with the best quality to design this ISP, you must follow certain guidelines and use proper equipment to attain optimal performance.

⚠ **WARNING：Failure to follow these instructions will void your warranty, and may result in hidden damage to the ISP. Damage to the ISP can cause loss of structural integrity, which may result in serious personal injury or death.**

A proper saddle height (FIG. 1) brings out the best performance and comfort in your bicycle. To meet the correct saddle height, the integrated seat post might require cutting off at a specific length. This is a brief cutting and attention guide. Since the cutting of the ISP is a complicated task requiring training and experience, only Giant dealers can complete the sophisticated process.
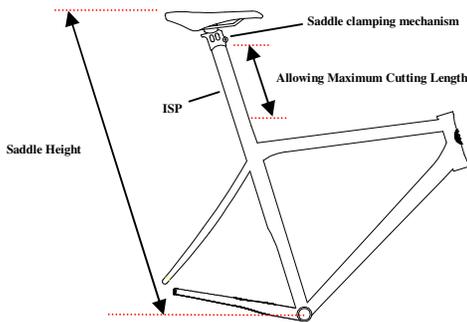

FIG. 1

ISP Cutting Instructions

Special Tool:

Cutting Guide	

Step 1: Determine the length to be cut.
   The length to be cut = the saddle height before cut – the correct saddle height.

⚠ **CAUTION：The cutting length must not exceed the limits; otherwise the saddle will fail to be installed onto the seat post. (See the chart below)**

Allowing Maximum Cutting Length (FIG. 1)

	TCR Advanced	TCR Time Trial
XS	120mm	
S	120mm	140mm
M	120mm	130mm
M-L	110mm	
L	110mm	110mm

Step 2: Loosen the saddle clamp bolt and remove the saddle.

Step 3: Prop the Cutting Guide open with a hex key. Then, install the Cutting Guide onto the integrated seat post.

⚠ **CAUTION：Avoid scratching or damaging the integrated seat post during the installation of the Cutting Guide.**

Step 4: Place the Cutting Guide to the precise location of the desired cut. Be sure to double-check your measurement. Rechecking measurements is easier than buying another ISP frame.

Step 5: Tighten the Cutting Guide bolt correctly to 20 kgf-cm (17 in-lb)
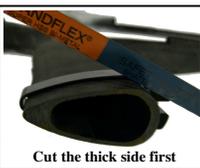
Step 6: Put the seat tube in a horizontal position.
Use the Cutting Guide to cut the integrated seat post completely straight, while moving slowly and smoothly.

Cut the thick side first

Next, cut the thin side

⚠ **CAUTION：To avoid fraying the composite fibers. Using a fine tooth (32 teeth) saw blade is recommended.**

⚠ **CAUTION：Be sure to wear appropriate safety equipment, such as glasses, gloves and a dust mask. Make sure not to inhale any of the dust!**

⚠ **CAUTION：Mind the final process of the cutting to avoid splintering the materials.**

Step 7: Carefully Sand down any burrs with fine emery paper. Clean off the dust with a damp rag and discard it immediately.

Step 8: Loosen the Cutting Guide bolt and prop the Cutting Guide open with a hex key. Next, remove the Cutting Guide from the integrated seat post.

Step 9: Install the saddle onto the seat post. Make sure to follow the installation instructions provided by the manufactures of the frame and the saddle.

INTEGRATED SEAT POST&TRI-BAR CUTTING GUIDE

⚠ **CAUTION：Tighten the saddle clamp bolt with a recommended torque to avoid the saddle from slipping down. Recommended tightening torque：30-40kgf-cm (26-35 in-lb). For seat fixing bolt using a 13mm spanner, tighten to 185 Kgf-cm(160 in-lb)**

Seat fixing bolt

Saddle Clamp bolt

⚠ **CAUTION：Before clamping any item to the seat post, make sure the clamp is free from any burrs or sharp edges. This does not only apply to the Saddle clamping mechanism that holds the saddle, but also the clamps of other accessories, such as tail lights, reflectors and bags that might be fixed to the seat post.**

⚠ **CAUTION：Do not grease the integrated seat post or the inner side of the saddle clamping mechanism.**

⚠ **CAUTION：The ISP cannot be under the Mini Insert Mark. If the integrated seat post is not inserted deep enough into the seat clamp structure, the integrated seat post may break and result in a serious accident.**

FIG. 6   Mini Insert Mark

ISP Adjustment Instructions

To finely adjust a saddle height, washers might be used to add the height.

Special Tool:

Washer
(10mmX1, 5mmX1, 3mmX2)
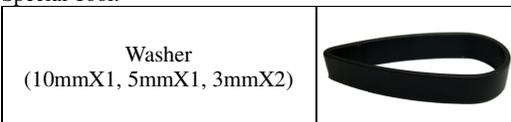
Step 1: Remove the saddle.

Step 2: Select a washer with suitable size before the installation. There are three selections: 10mm 1pc, 5mm 1pc, and 3mm 2pcs.

Step 3:

Put the washer into the saddle clamping mechanism

Step 4: Install the saddle onto the seat post.

⚠ **CAUTION：Avoid scratching or damaging the integrated seat post during the installation.**

⚠ **WARNING：After adding the washer, make sure the ISP is not under the Mini Insert Mark. (See FIG. 6) If the integrated seat post is not inserted deep enough into the seat clamp structure, the integrated seat post may break and result in a serious accident.**

Tri-bar Cutting Instructions

If your bike is equipped with a Tri-bar, some parts might be cut off to fit your comfort and performance. (See Fig.8~9) The Tri-bar can be trimmed by using the same step-by-step cutting instructions as described for an ISP. However, there are some additional considerations when cutting a Tri-bar.

Before Cutting

FIG. 8

After Cutting

FIG. 9

◆ The Tri-bar should be clamped securely in a vice before cutting. To accommodate this without cracking the bar, the bar should be held in a tubing fixture. You can make this fixture quite easily by boring a 23.8mm diameter hole in a 4" section of 2" x 4" and then cutting the block in half. The two blocks can then be placed into the vice to hold the bar firmly in place. A similar functional clamp can also be used for this purpose. Be careful not to over tighten the vice.

⚠ **CAUTION：It is critical that any fixture that clamps the tri-bar is free of sharp edges and burrs.**

◆ To be able to assemble brake levers and have enough space for the hands, make sure the lengths remained on both sides are exactly 120mm.

Length to be cut

120 mm

Length to be remained
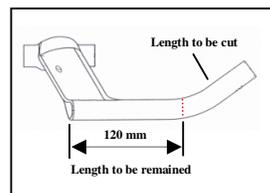
◆ Make sure to follow the installation instructions provided by the manufactures of the handlebars.

◆ It is important to inspect the bars carefully before installation. Burrs and sharp edges should be easily removed by using fine emery paper.

Warranty

Please refer to the Giant Owner's Manual or visit our website: www.giant-bicycle.com for complete provisions of the warranty.