



WWW.GIANT-BICYCLES.COM

GIANT PROPEL & LIV/GIANT ENVIE

OWNER'S MANUAL



Table of Contents

1	INTRODUCTION	2
2	INTENDED USE OF THIS MANUAL	2
3	PRECAUTION	2
4	TAKING CARE OF YOUR COMPOSITE BICYCLE	3
5	OVERDRIVE 2 HEADSET INSTRUCTION	4
6	COMPOSITE FRONT FORK	5
7	SPEEDCONTROL BRAKES	6
8	INTEGRATED SEATPOST (ISP) AND SADDLE CLAMP	7
9	ADJUSTING THE SADDLE OFFSET	10
10	VECTOR SEATPOST AND SEAT CLAMP (NON-ISP MODEL)	11
11	POWERCORE PRESS-FIT BOTTOM BRACKET	14
12	CONTACT SLR AERO HANDLEBAR INSTRUCTION	16
13	DERAILLEUR CABLE ROUTING INSTRUCTION	18
14	ROUTING REAR BRAKE CABLE	19
15	CABLE ROUTING PARTS	20
16	FRAME TECHNICAL DATA	21
	16.1 Propel Advanced SL	21
	16.2 Envie Advanced	22

1 INTRODUCTION



Congratulations on your new Giant high-performance road bicycle! To ensure your safety and to enjoy your new bike to its fullest, we urge you to read this manual. Your best resource for service and technical assistance is your local Giant retailer. To find one, or to learn more about Giant, go to giant-bicycles.com.

2 INTENDED USE OF THIS MANUAL

This manual is intended to be a reference guide to help you become familiar with the technology and custom components on your new Propel or Envie series bike. Some of the technologies covered in this manual may not be relevant to your particular bike. If you have any questions, please contact your authorized Giant retailer. This manual is not meant to replace the general bicycle owner's manual or the parts manufacturers' technical manuals that also came with your bicycle.

3 PRECAUTION

WARNING: Be sure to thoroughly read and understand the warnings and instructions in this manual before riding your new bicycle. Not every bicycle is built for every activity. An authorized Giant retailer can clarify the intended use of your bicycle.

CAUTION: Giant products should be installed by a qualified bicycle mechanic with appropriate tools. Bolts that are too loose or too tight can cause failure. Giant assumes no liability for products that are improperly installed.

WARNING: Bicycle assembly is a complicated task and requires training and experience. Please use an authorized Giant dealer for assistance and installation. Failure to follow this warning may cause the bicycle to malfunction, which may result in serious injury or death.

4 TAKING CARE OF YOUR COMPOSITE BICYCLE

Propel and Envie series bicycles feature professional-grade frame technology used by world champion racers. These frames are handcrafted with the most advanced materials, engineering and construction methods.

Composite parts are different from metal parts, therefore the treatment to the composite parts is also different.

1. Prevent composite parts from sharp edges or excessive pressure

Sharp edges or clamping mechanisms can damage carbon fiber composite by creating a stress load or high pressure point. Please follow these procedures to make sure the parts or components are carbon-compatible before installing any carbon fiber part, or attaching any component to an existing carbon fiber part.

It is normal, and no reflection of the strength of the frame, that you may feel movement in the tubes when you squeeze them. However, repeated compression of the sides of the tubes could eventually lead to frame damage. Do not squeeze the frame tubing, and never clamp the tubing in any mechanical device, including car racks.

2. Clean before installation of carbon fiber composite parts

With some interfaces of metal parts, grease is used on the clamping surfaces to prevent corrosion. When adjusting, always grease the bolt threads. Grease reduces corrosion and allows you to achieve the correct tightness without damaging tools.

However, with most carbon parts you should avoid grease. If grease is applied to a carbon part that is clamped, the part may slip in the clamp, even at the recommended torque specification. The carbon part should be assembled in a clean, dry state. Contact an authorized Giant retailer for special carbon prep products recommended by Giant.

3. Never modify the fork, frame or components

The parts of the Propel and Envie series framesets have been precisely designed to meet strength and function requirements for safe riding. Modifying these parts in any way may make the bike unsafe. Only an authorized Giant dealer should perform some of the modifications illustrated in this manual. For example, cutting the ISP.

Never use suspension forks on a road bike frame. It can add stress and damage the frame. Do not change the style and/or length of forks. If you are unsure if a fork is compatible with a frame, contact your authorized Giant dealer. Any modification of a frame, fork or components means that the bike no longer meets our specifications and therefore voids the bike's warranty.

5 OVERDRIVE 2 HEADSET INSTRUCTION

The Propel and Envie series bikes feature OverDrive 2 to offer unprecedented steering performance with no additional weight. The OverDrive 2 headset features massive 1 1/4-inch top and 1 1/2-inch bottom bearings and provides up to 30 percent more torsional steering stiffness.

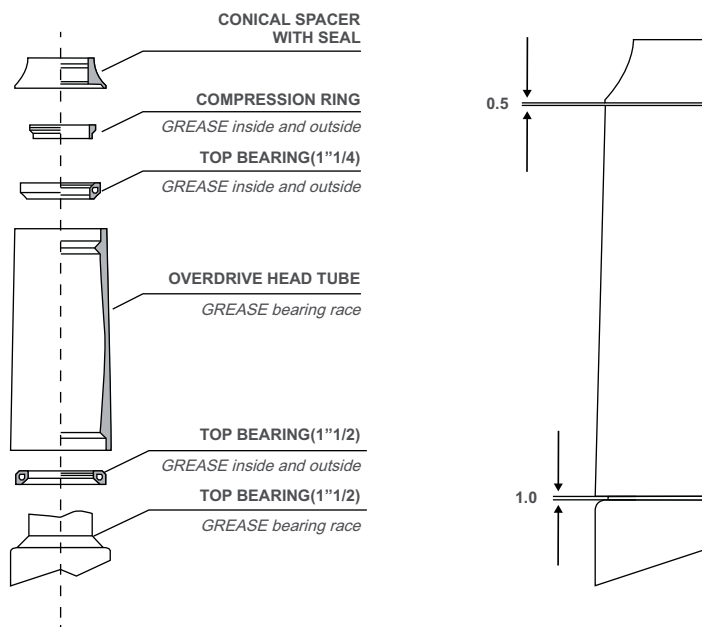
Once the headset assembled, make sure that some play exists between:

- the fork crown and the bottom of the headtube
- the top of the headtube and the conical spacer

So the steerer rotates freely and easily without resistance.

There is no minimum clearance value but only a recommended value:

- lower clearance : 1.0mm
- upper clearance : 0.5mm



To learn more about OverDrive 2 technology introduction, please visit the Giant website at giant-bicycles.com.

6 COMPOSITE FRONT FORK

Steerer tube

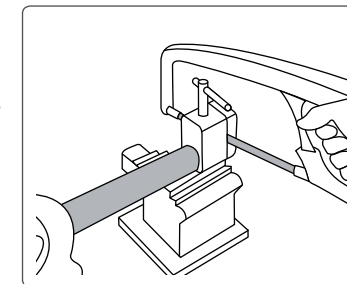
The steerer tube of the Propel and Envie forks are constructed with carbon fiber material for light weight and optimized stiffness.

Please contact your authorized Giant dealer to modify the steerer length to your preference. If you are a qualified professional mechanic, please follow these instructions:



CAUTION:

1. Always use a quality hacksaw with a fine-tooth blade when cutting the steerer tube. A poor quality blade could damage the steerer material.
2. Lay the fork on a flat, stable surface. Use a professional saw guide to help you cut. Measure twice, cut once!
3. Do not clamp the composite steerer with more than 8Nm of torque. Over-clamping force could damage the steerer tube.
4. A professional saw guide for steerer cutting is must to be used. For example: PARK TOOL Oversized Adjustable Saw Guide.

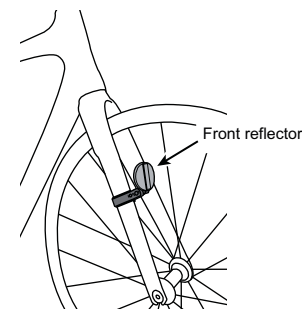


Fork structure

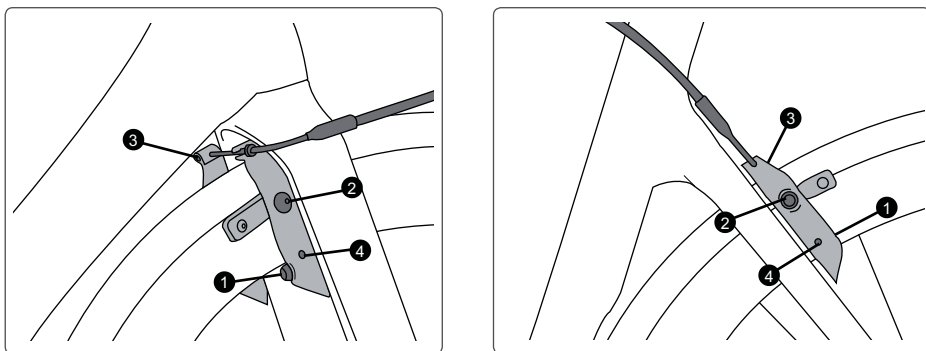
Do not file the fork safety tabs or drill any holes in the fork structure.



WARNING: The fork has been designed to optimize performance. Do not modify the fork by drilling or filing. Any modification will affect the fork structure and damage it. This may result in serious personal injury or death.



7 SPEEDCONTROL BRAKES



The Giant SpeedControl Brake is optimized for the Propel and Envie series bikes. It's designed to meet aerodynamic needs and provide sufficient braking force.

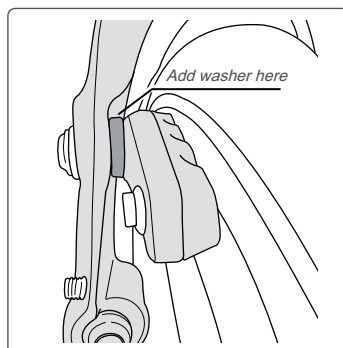
WARNING: Bolts that are too loose or too tight can cause failure. Do not exceed the maximum torque value. Over-fastening bolts may damage components, the fork or the frame, which may cause loss of control and can result in serious injury or death.

	Bolt Description	Recommended Bolt Torque			
		Size	Nm	LBs-In	Kgf-cm
1	Pivot bolts	M6	6-8	53-70	61-81
2	Pad-mounting bolts	M5	6-8	53-70	61-81
3	Cable-fixing bolts	M5	3-7	26-62	30-71
4	Spring tension adjuster				

There are two washers for pad adjustment. Please refer to the recommended chart below.

	Washer	ID (mm)	OD (mm)	Thickness (mm)
1	Thin washer	8.5	13	2.3
2	Thick washer	8.5	13	3.3

Rim width	Washer
19 – 23mm	1 OR 1+2
24 – 28mm	0 OR 1



8 INTEGRATED SEATPOST (ISP) AND SADDLE CLAMP

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 injury or death.

A proper saddle height is essential for experiencing the best performance and comfort in your bicycle. To meet the correct saddle height, the ISP may have to be cut to a specific length. Cutting the ISP is a complicated task that requires training and experience. Please visit your authorized Giant dealer to perform this sophisticated process.

ISP cutting instructions

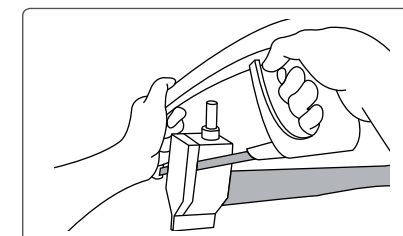
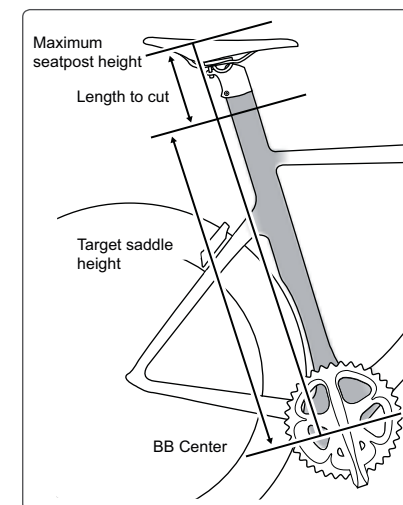
Step 1: Determine the length to cut

Install the saddle onto the seatpost using the included saddle clamp mechanism. Put the saddle in a horizontal position and then determine the length to be cut.

CAUTION: The additional range of saddle height adjustment (utilizing the included spacers) provides fine-tuning adjustment after the ISP is cut.

WARNING: The final cut length must not exceed the Maximum Cutting Length limits (see chart below). Cutting the ISP below this limit may result in the inability to attach the seat clamp and can cause structural failure of the ISP.

Frame Size	Maximum Cutting Length
XS	105mm
S	105mm
M	100mm
M/L	100mm
L	100mm
XL	100mm



Step 2: Disassembling for cutting

Loosen the saddle clamp bolt and remove the saddle.

Step 3: Cutting the seatpost

NOTE: A professional saw guide for seatpost cutting is must to be used. For example: PARK TOOL Oversized Adjustable Saw Guide

CAUTION: Use a fine-tooth (32-tooth) saw blade to avoid fraying the composite fibers. Take care when finishing the cutting process to not splinter the composite.

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

- Lay your frame flat on a clean surface, protecting the finish with a clean soft cloth at points of contact.
- Place the Saw Cutting Guide at the precise location of the desired cut.
- Be sure to double-check your measurement. Measure twice, cut once.

CAUTION: There is no way to restore the frame to a higher saddle height after the ISP is cut. Please make sure your measurement is correct and that you cut precisely.

Step 4: Clean the cut

Remove the saw guide and carefully sand down any burrs with fine emery paper. Clean off the dust with a damp rag and discard it immediately.

Step 5: Assemble the saddle clamp

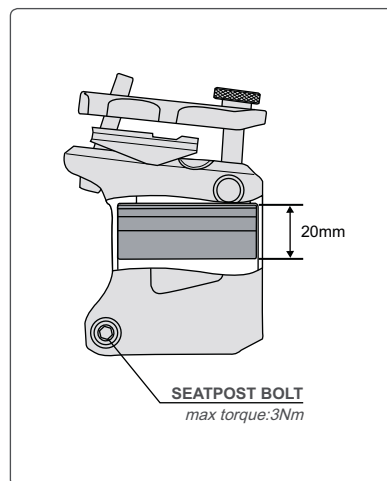
Install the saddle clamp onto the ISP and tighten the clamp seatpost bolt to 3Nm maximum.

CAUTION: Do not grease the ISP or the inner side of the saddle clamp.

• Adjusting or correcting the saddle height

The saddle height can be corrected with washers.

WARNING: Do not raise the seat clamp without washers or with more than 20mm of washers. This may result in damage to the ISP. ISP failure may result in serious personal injury or death.



Follow this table to determine the appropriate washer combination:

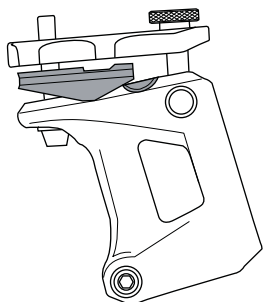
		WASHER					
		1mm	1mm	3mm	5mm	10mm	10mm
HEIGHT	1	1					
	2	1	1				
	3			3			
	4	1		3			
	5				5		
	6	1			5		
	7	1	1		5		
	8			3	5		
	9	1		3	5		
	10					10	
	11	1				10	
	12	1	1			10	
	13			3		10	
	14	1		3		10	
	15				5	10	
	16	1			5	10	
	17	1	1		5	10	
	18			3	5	10	
	19	1		3	5	10	
	20					10	10

9 ADJUSTING THE SADDLE OFFSET

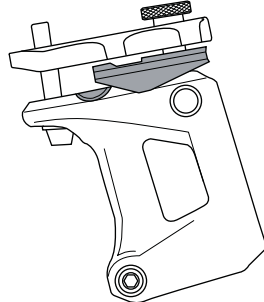
The saddle clamp can be assembled forward or backward. So you can compensate with a +5mm or -25mm position.

WARNING: Saddle clamps must be assembled as illustrated. If the clamps are not aligned, they may damage the saddle. This may result in damaging the seatmast, and seatmast failure can result in serious personal injury or death.

Offset:-25mm



Offset:5mm

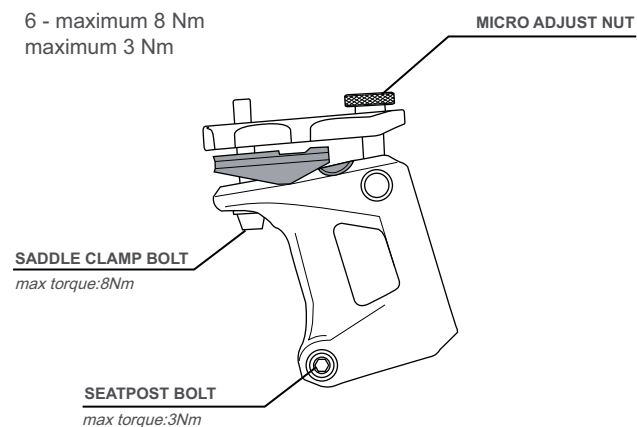


• ISP SYSTEM TORQUE VALUE

WARNING: Bolts that are too loose or too tight can cause failure. Do not exceed the maximum torque value. Over-clamping bolts may damage components or frame, which could result in serious personal injury or death.

Saddle clamp bolt
Seatpost bolt

6 - maximum 8 Nm
maximum 3 Nm



10 VECTOR SEATPOST AND SEAT CLAMP (NON-ISP MODEL)

The Giant Vector Seatpost is built with Giant Composite Technology for lightweight, aerodynamic performance. To achieve the best riding experience and proper saddle height, the seatpost may need to be cut.

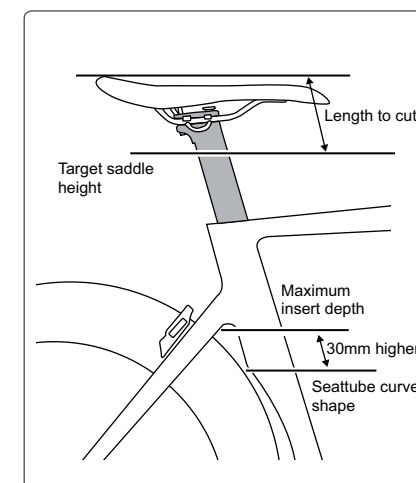
WARNING

- Cutting the seatpost is a complicated task that should be performed by a professional mechanic.
- If you have any doubts about your ability to cut the seatpost correctly, please contact an authorized Giant dealer.
- Failure to follow these instructions will void your warranty, and could damage the frame and/or the seatpost, which may result in severe injury or death.

CAUTION: Use the carbon assembly paste for final installation, which could prevent the seatpost from slipping down and damaging the frame. It could also prevent possible creaking due to the friction between the frame and the seatpost.

Seatpost Cutting Procedure

- **Determine the length to cut**
 1. Install your saddle to the Giant Vector Seatpost and adjust the saddle to a horizontal position.
 2. Adjust the seatpost up and down and determine the correct saddle height. If the saddle cannot be lowered far enough for proper fit, because the seatpost meets the seattube curve inside the frame, the seatpost must be cut.
 3. The seatpost should be cut at a 45-degree angle so that the bottom of the post slopes downward from the rear side to the front. This will help prevent damage to the frame if the seatpost is pushed too far down in the frame.



Note: In original condition, the seatpost length against frame sizes is as follows:

Frame size	Minimum saddle height(mm)
XXS	670
XS	670
S	690
M	700
M/L	700

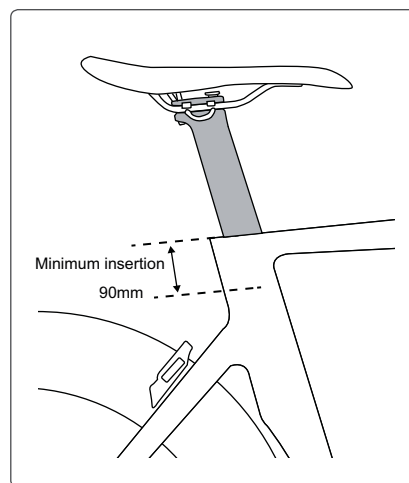
The seatpost should be cut from its original condition when the saddle height that you require is lower than the minimum saddle in the chart above.

Note: The maximum seatpost insert depth is at 30mm above than the seattube curve. Do not let the seatpost reach the seattube curve shape when riding the bike.



WARNING:

- Be slow and careful when inserting the seatpost into the seattube. Too much downward force may damage the frame and/or the seatpost.
- The minimum insertion of the Vector seatpost is 90mm. Do not overcut the seatpost. It is necessary to make a precise measurement before cutting the seatpost.
- If the seatpost reaches the seattube curve shape when riding the bike, it will damage the frame.



• Cutting the seatpost

4. It is recommended that you use a professional saw guide and a fine-tooth saw to cut the seatpost.
5. Place the saw guide at the precise location of the desired cut. Be sure to double-check your measurement.

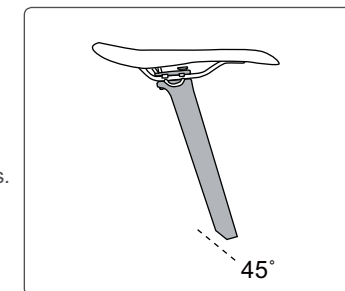
6. Cut the seatpost at a 45-degree angle so that the bottom of the post slopes downward from the rear side to the front side. This will help prevent damage to the frame if the seatpost is pushed too far down.



CAUTION: Use a fine-tooth (32 teeth) saw blade to avoid damaging the composite fibers.



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



7. Make a clean cut carefully.



CAUTION: Do not splinter the composite when finishing the cutting process.

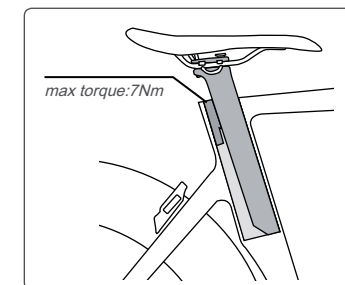
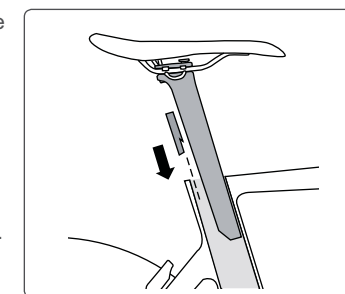
8. Remove the saw guide and carefully sand-down any burrs with fine emery paper. Clean off the dust with a damp rag and discard it immediately.
9. Install the saddle onto the seatpost and recheck the target saddle height.

Vector Seatpost Clamp

The seat clamp system provides optimal integration with the frame, and also better clamping with the Vector seatpost.

• Installation

1. Ensure the seatpost length is correct before installation.
2. Slightly insert the Vector seatpost into the seattube.
3. Attach the seat clamp to the seatpost backward, then slightly insert the clamp into the seattube until it stops. (Refer to following figures.)
4. Adjust the saddle to your height preference, and then fasten the clamp bolt with M5 hex key to the maximum torque: 7 Nm / 62 lbs-in / 71kgf-cm.



11 POWERCORE PRESS-FIT BOTTOM BRACKET



WARNING:

- Do not modify the frame. Do not face, grind or cut the bottom bracket shell. Any modification will affect the bottom bracket interface and will void the warranty.
- Failure to follow these instructions may result in hidden damage to the composite frameset. Damage to the frameset may cause loss of structural integrity, which may result in serious personal injury.



CAUTION: Only proper installation will bring out the best performance and comfort in your frameset. Since the installation of the Press-Fit BB adapter is a complicated task requiring training and experience, only authorized Giant retailers should complete the sophisticated process.

There are different types of Press-Fit BB adapters. Be sure to check with the manufacturer before selecting which BB adapter to use. If the BB adapter is not suitable, serious personal injury may result.

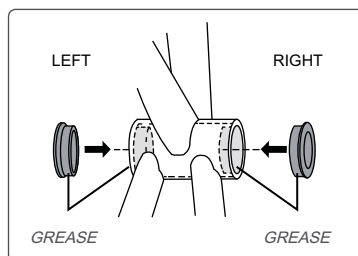


WARNING: Installing an unsuitable BB adapter will cause malfunction, which could result serious injury or death.

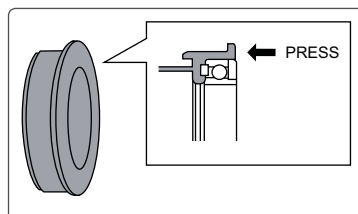
Installation

STEP 1:

1. Apply neutral grease inside the frame's bottom bracket cups.
2. Then install the left and right-hand press-fit BB adapters.
3. Press-fit the adapters by tightening them in a vise, while applying pressure evenly to both sides so that they do not become angled.



CAUTION: When doing this, push only at the points indicated by arrows in the illustration. Pushing anywhere other than these points may damage the ball races of the bearings.

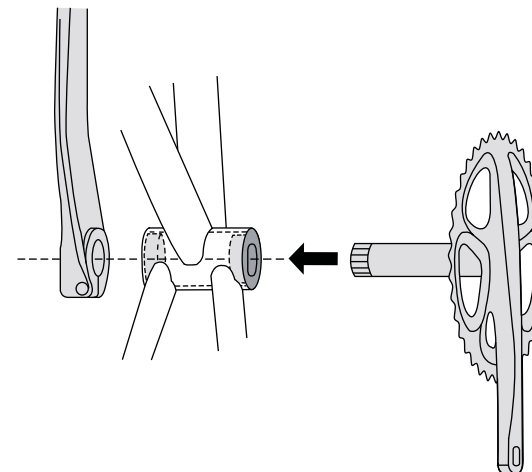


STEP 2:

Installation of the front chainwheel/crank:

Note: Make sure to follow the installation instructions provided by the manufacturer of the chainwheel/crank.

Note: This manual is designed to provide information for installation of a bottom bracket into a Giant composite frameset. Please refer to the specific manufacturer's enclosed guide for final crankset installation details.



Removing

Push out firmly from the inside using a blunt tool.

Note: Do not reuse the adapters as they can be damaged from removal.

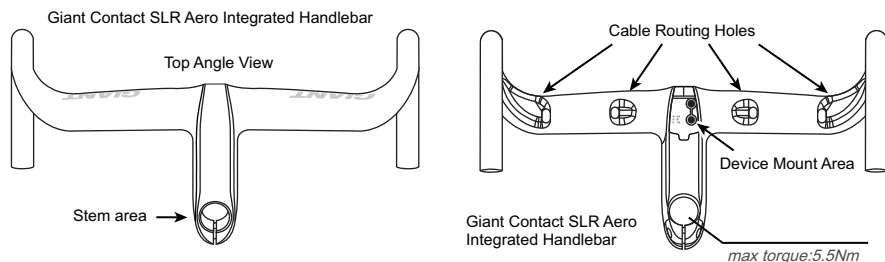


CAUTION: Avoid scratching or damaging the frame/BB shell during the removal of the BB adapters

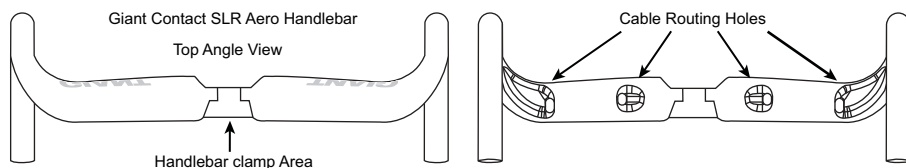
12 CONTACT SLR AERO HANDLEBAR INSTRUCTION

Propel and Envie series bikes feature the most aerodynamic handlebar, the Contact SLR Aero series: the Contact SLR Aero Integrated handlebar or the Contact SLR Aero handlebar.

The Contact SLR Aero Integrated handlebar is a one-piece design that provides the lowest weight and aerodynamic advantage, and also easy installation and maintenance.



The Contact SLR Aero handlebar is designed with aerodynamic technology and is compatible with the Giant Contact SLR Stem.



• Installation

1. Ensure the steerer is cut to correct length. Ensure that there is sufficient clamping area for the stem. Measure twice, cut once. (Refer to section FRONT COMPOSITE FORK)
2. Ensure that the correct compression nut for the fork is installed inside the steerer tube. Refer to fork owner's manual if you are unsure.
3. Install the Aero bottom spacer onto the steerer tube first, then adjust the handlebar height by adding the Aero stepped spacer if necessary. (Refer to Fig Contact SLR Aero Integrated handlebar backward view on next page)
4. Loosely reassemble the bolt on the steerer tube clamp portion of the stem and slide the stem down onto the steerer tube, gently pressing downward until the stem is seated as far down the steerer tube as possible and is seated over the step on the Aero stepped spacer.
5. Confirm that there is between 2-4mm of space between the top of the stem body and the top of the steerer tube.

6. Install the top cap and compression bolt on top of the stem and into the compression nut. Note that the top cap sits in a recessed portion of the stem and flush with the top of the stem when installed correctly.
7. Adjust the headset bearing pre-load as per the headset manufacturer's instructions.
8. Align the bar with the front wheel.
9. Tighten the steerer tube clamp bolt to the torque measurement marked by the laser etching between or along the steerer tube clamp.
10. Alternate tightening between the two fasteners until the torque measurement is achieved.

CAUTION: It is possible to crush the steerer tube if fasteners are tightened beyond the recommended torque values. Never use grease on a carbon fiber steerer tube. Grease should also be avoided on alloy or steel steerer tubes.

Note: Top cap and compression bolt must remain in place at all times when the bicycle is in use.

WARNING: Over-tightening of the handlebar clamp can void the warranty and lead to loss of control of the bicycle, which may result in severe injury or death.

11. For Contact SLR Aero handlebar,
 - Place the handlebar in stem clamp opening, position the faceplate over the handlebar, and install the faceplate screws until they are finger tight.
 - Center handlebar and position to your preference in the stem clamp. Tighten screws enough to secure the handlebar in place.
 - Tighten the faceplate screws to the recommended torque value etched on the bar.
12. Ensure that the control unit mounting area is free of dirt and grease.
13. Install the control units to the handlebar by sliding them into position. Refer to the fig Contact SLR Aero Handlebar Internal Cable Routing Map for the brake cable and derailleur cable routing.

Note: Shift/brake lever clamps on handlebar of recommended torque: 4-5 Nm (35-43 lbs-in/40-50 kgf-cm)

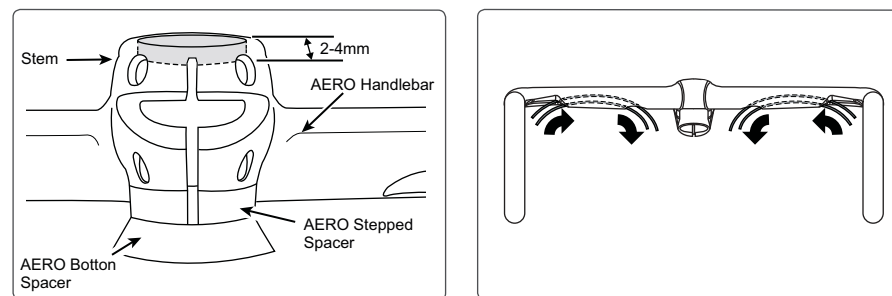


Fig. Contact SLR Aero Integrated handlebar backward view

13 DERAILLEUR CABLE ROUTING INSTRUCTION

CAUTION: Use the manufacturer's technical manuals of electric shifting system in combination with below instruction for the electric shifting system installation.

1. Start out front and rear derailleur cables from the CONTACT SLR AERO HANDLEBAR of inner route. (Refer to Installation section - CONTACT SLR AERO HANDLEBAR)
2. Thread the cable(s) into the cable hole at the front-left of toptube (refer to following fig: toptube cable hole 1, 2), and pass the cable(s) through the downtube and thread out from the bottom bracket.

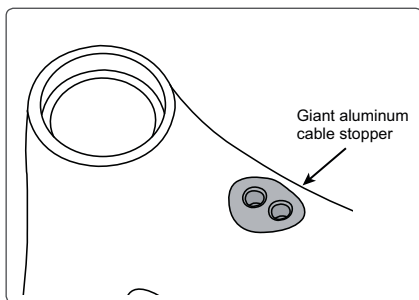


fig: Toptube cable hole 1

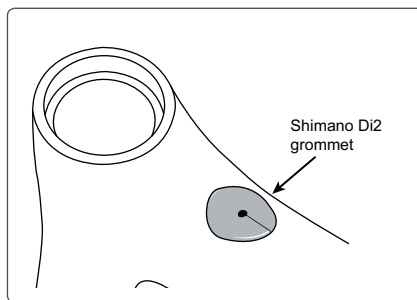


fig: Toptube cable hole 2

3. Thread derailleur cables into the specific cable hole at the bottom bracket (refer to following fig: BB cable hole).

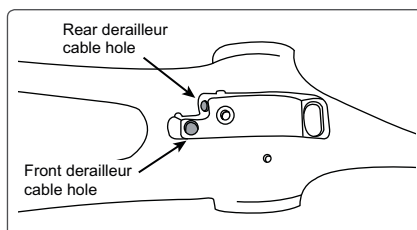


Fig. BB cable hole

4. Pass the front derailleur cable through the derailleur cable hole in following fig: Front derailleur cable hole.

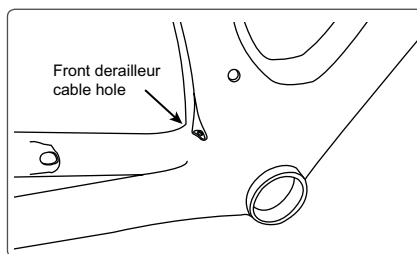


Fig. Front derailleur cable hole

5. Pass the rear derailleur cable through the right of chain stay and treat out from the rear derailleur cable hole as following fig: Rear derailleur cable hole.

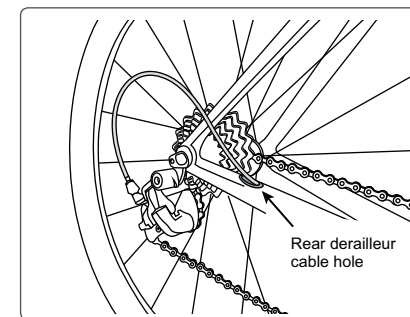


Fig. Rear derailleur cable hole

14 ROUTING REAR BRAKE CABLE

1. Start out rear brake cables from the CONTACT SLR AERO HANDLEBAR inner route. (Refer to Installation section - CONTACT SLR AERO HANDLEBAR)
2. Thread the rear brake cable into the cable hole at the left of the toptube. (Refer to fig. Rear brake cable hole front)

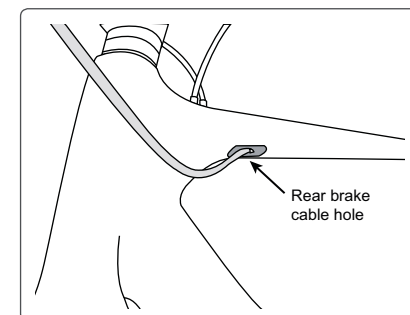


Fig. Rear brake cable hole front

3. Pass the cable through and out from the cable at the rear end of toptube.

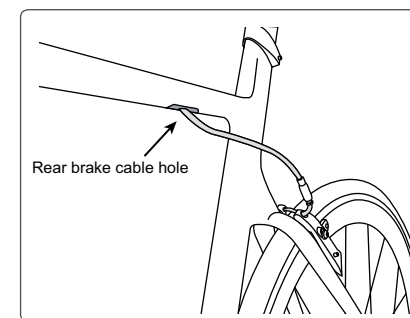
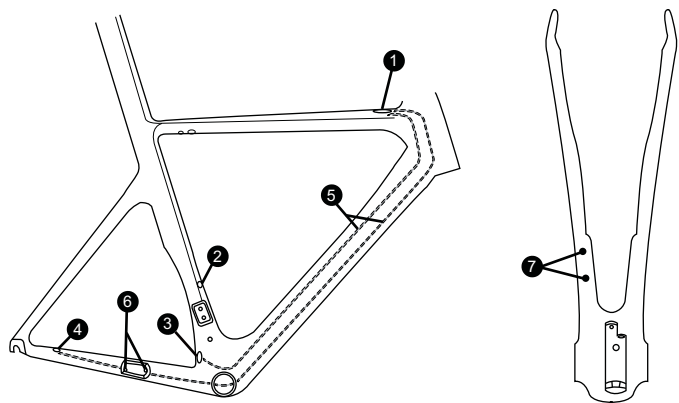










Fig. Rear brake cable hole rear

15 CABLE ROUTING PARTS



	Part Description	Electric shifting system part number	Mechanical shifting system part number	
1	Toptube cable stopper / Di2 grommet	1472-CC516B-301	1472-CM297A-401	 516B  297A
2	Cable clip / bottle mount	147-9109-7	X	
3	Front derailleur cable grommet	1472-GROMET-03	X	
4	Chainstay cable grommet	1472-CC515B-301	Nose cap of rear derailleur outer cable casing	
5	Internal derailleur cable casing	X	1630-CM280B-401	
6	RideSense hole plug	134-SENSOR-202	134-SENSOR-202	
7	Battery chamber mount hole plug	X	134-FRAMER-203	

16 FRAME TECHNICAL DATA

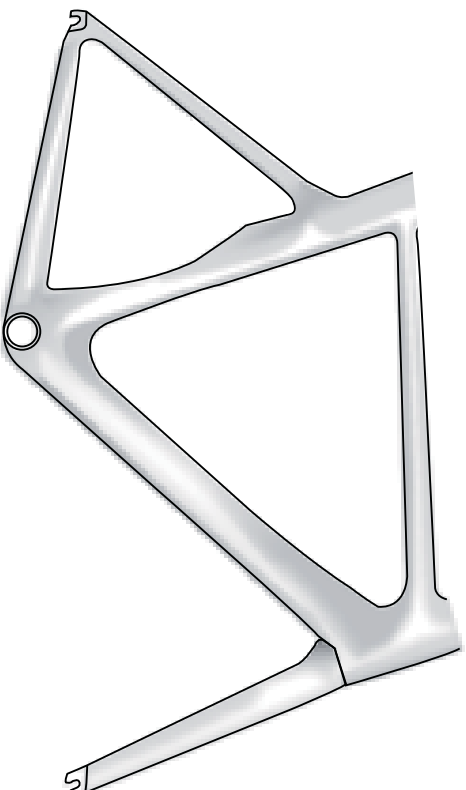
16.1 Propel Advanced SL



Series	Propel Advanced SL					
Head Parts Diameter	φ42/φ47					
Seatpost Diameter	Giant Aero ISP					
Front Derailleur Diameter	Braze on					
Rear O.L.D	130					
RC	405					
Max Tire Type	700Cx23C					
Commercial Size	XS	S	M	ML	L	XL
Head Tube Length (mm)	120	135	150	170	185	200
Top Tube Horizontal Length (mm)	515	535	555	570	585	605
Seat Angle (Degree: °)	74.5	73.5	73	72.5	72.5	72
Head Angle (Degree: °)	71	72	73	73	73	73

16 FRAME TECHNICAL DATA

16.2 Envie Advanced



Series	Envie Advanced				
Head Parts Diameter	φ42/φ47				
Seatpost Diameter	Vector Seatpost				
Front Derailleur Diameter	Braze on				
Rear O.L.D	130				
RC	405				
Max Tire Type	700Cx23C				
Commercial Size	XXS	XS	S	M	L
Head Tube Length (mm)	110	130	145	160	180
Top Tube Horizontal Length (mm)	500	515	532	550	565
Seat Angle (Degree: °)	75	74.5	73.5	73	72.5
Head Angle (Degree: °)	70.5	71	72	73	73