

Valdora Cycles Composite Frame Care

Before you begin.......Notice – Valdora framesets / components should be assembled by a professionally certified bicycle mechanic who has experience working on bikes with internal cable routing. Please thoroughly review these instructions before beginning any work on this bike or beginning assembly. When utilizing a repair stand, use a stand that can clamp to an aero seat post or a stand the attaches to the frames dropouts. The repair stand clamping mechanism should never clamp onto any portion of the frame besides the seat post or drop outs.

Head Set An integrated Cane Creek style, 1-1/8", 36/45 (such as a IS-2) headset is required. Grease the insides of the head tube where the bearings sit. Follow manufacturers instructions provided with headset.

Bottom Bracket Required bottom bracket - 68 mm and BSA threaded. Grease the face and threads prior to installation. Loc-Tite or other thread binding substance should not be used! Follow the manufactures instructions for installation torque.

Front Derailleur Mounting Bracket Grease the threads of the mounting bolts before installing. Make certain the bolts are tightened enough to keep the bracket from moving during front derailleur shifts.

Drop Outs / **Derailleur Hanger** This frame is equipped with standard drop out spacing of 130 mm. Generally hubs requiring spacing of 128 mm to 132 mm can be used but no greater and no less. Do not attempt to compress, bend or cold set the drop out spacing! The rear derailleur hanger is replaceable. If at any time, the replaceable derailleur hanger is bent, stop riding immediately! Contact Valdora or your local dealer to acquire a replacement derailleur hanger.

Cable Routing: Cables run bare through frame (no internal housing). The PHX2 frame comes with removable lengths of poly housing threaded through the top tube, down tube, and chain stay. You should have also received 8 black cable stopper inserts. Before you install your cables, you will need to precut your cable housing to the desired lengths and attach standard housing ferrules. Insert your cable through the pre-cut housing and ferrule, though a black stopper insert, and then through the removable housing already in the frame. Once the cable is all the way through the frame, you may pull out the removable housing. Slide another black stopper insert on the cable and then the exit piece of cable housing with ferrule. Continue with the next housing. Do not use a ferrule on the end of the housing that goes into the silver cable guide toward the front derailleur. Save removable housing! Reverse cable install procedure sliding removable housing over the cable and twisting prior to removing cables for replacement. This will make replacing cables easier and faster. If you accidentally removed the temporary poly housing, put a 90 deg bend in a der cable 5 inches from the end. Push the bent cable into top cable port and maneuver and pull into head tube so that you can get a hold of the end of the cable with your fingers. Pull the end of the cable through the head tube so it sticks out several inches. Next push a piece of the poly tubing from the derailleur cable port near bottom bracket shell until it exits into the head tube. Now you should have the poly tubing and a der cable sticking out of the head tube. Push derailleur cable into poly tubing approx 12 inches. You can wrap a small piece of tape around the cable / poly tubing interface to keep them attached if necessary. Gently pull the poly tubing from back into frame by grasping protruding tubing near bottom bracket shell. Once the poly tubing / cable interface are past the top cable port, gently pull cable until cable and poly tubing come through the top cable port. You should have the poly tubing run from top cable port to rear cable port. Put a tab of tape at both ends so it does not pull/fall back into frame. Repeat for other derailleur and rear brake. For a fast explanation and demonstration go to Youtube.com Search "Valdora bikes" on www.YouTube.com for tutorial on running cables when cables and tubing have been removed from frame.

Finish Cleaning, washing, waxing compounds available from your local bicycle dealer can be used to keep your bicycle looking sharp. Never submerge your bike in water or spray with a hose. This can damage or decrease the life of your bicycle components. A damp rag and spray bottle will get the job done. If at some point you choose to repaint your Valdora frame – select a painter experienced in the art of painting carbon composite. Paint stripping compounds must NOT be used. Nor should the frame be sand blasted, bead blasted or stripped by any other method. The surface paint should be gently scuffed by hand with sand paper to prepare for painting. Chemical paint strippers or blasting can weaken the composite surface.

Failure to follow these instructions could result in serious injury or death. Only an experienced mechanic should assemble!



Seat Post The PHX2 frame comes with a proprietary aero seat post. No other seat post will work.

Seat tube binder: This is the clamp that is partially bonded to the frame seat tube which holds the seat post. Do not over tighten the seat tube clamp screws. Turn the screw a couple turns evenly alternating between screws until both screws reach the recommended torque. Be careful not to over tighten. Over tightening will result in a stripped clamp. This portion of the clamp is bonded into the frame and will lead to unnecessary expense for repair. Torque both screws to 5 ft. lbs (~7 Nm).

Valdora Seat Post / Saddle Compression Clamp **IMPORTANT++

The clamp consists of 6 pieces plus a M6 X 1.0 X 60 MM cap screw and M6 nut. These pieces are 2 cups, 2 cones, and 2 outer wings. See picture below





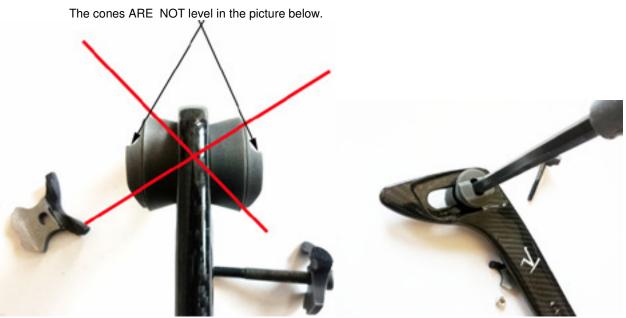
Insert seat post in the seat tube and lightly tighten the seat tube clamp to temporarily hold the post. (The correct saddle height can be adjusted after saddle is properly attached to seat post.).

Insert the seat post with the pointed end forward to achieve a 79 degree seat tube angle with clamp all of the way forward in the oval. OR insert the seat post with the pointy end facing backwards with the clamp all of the way forward to achieve a 76 degree seat tube angle.

Do not use grease or friction paste on any parts of this clamp. Clamp pieces may have some abrasive grit residue on surfaces from being tumbled. Do NOT clean this off.

Saddle Installation:

- Insert the tabs of the cups into the oval hole in the carbon seat post.
- Insert the cones into the cups on each side.
- Level the surface of the cones that the saddle rails rest on.



- Use a 10 mm hex wrench to level the cones by inserting the wrench in the large hole in the cones to turn.
- Adjust until saddle sets level or tilts as desired.
- Both sides must be lined up perfectly so that the saddle rails rest flush on the rail surface of the cones.
- Once the cones are leveled, place the saddle rails on the cones.
- Situate saddle rails on cones and adjust fore / aft on as desired.
- Install wing pieces over the outside of saddle rails. Insert cap screw and tighten into the nut.
- Loc-tite may be applied to the threads of the screw if desired.
- Torque the cap screw to approximately 10 ft.lbs / (13.5 Nm).

This clamp is a light weight racing component. It attaches with a single fastener. For safety, this bolt should be tested/tightened if needed prior to each ride. 10 ft. lbs.



Readjustment of clamp:

Valdora's aero seat post clamp is a compression clamp. It becomes increasingly difficult to separate the cones from the cups once the screw has been tightened and the clamp has been in use on the bicycle.

If adjustment is necessary, it may be possible to separate the cups and cones by gripping the cone with needle nose pliers through the 10 mm hole in the cone and a 2nd set of needle nose pliers or a large screw driver that will fit through the small hole in the cup. The motion of pushing the handles of the tools together may pop the cone out and separate the pieces. Use caution! The cup may become airborne when the pieces separate.

Replacement clamps are available from Valdora.