

# Composite Frame Care

## Kestrel CSX

*Congratulations on your Kestrel purchase! The carbon fiber composite of your Kestrel frame is significantly lighter and stronger than metals and, barring accident, will stand up to a lifetime of the hardest training and racing. But composite frames require slightly different care than metal ones. Even if you've been working on bikes for years, please take a few minutes to read the following guidelines.*

### General

**Repair stands.** The mechanical action of a repair stand concentrates enormous loads in a small area. As with any fine bicycle, clamp your Kestrel by the seat post only to avoid damage to the frame.

### Assembly

**Seat post.** Seat post size is 27.2mm. Maximum seat post insertion is 120mm (4.7 inches). The metal seat tube insert extends only this far into the frame. Inserting the seat post beyond this depth may put pressure on the composite walls of the frame, potentially damaging it. Seat posts may easily be cut down if a lower seat height is desired. As with any frame, grease the seat tube and seat post before insertion and regularly thereafter.

**Facing tools.** *Caution: Kestrel's carbon fiber composite is fairly abrasive and over time may dull facing tools.* Since all Kestrel frames are faced at the factory before paint, it is not necessary to face Kestrel frames again before assembly.

**Headset.** As with any fine bicycle, grease the insides and faces of the head tube where the cups go in, and the crown race seat. Cups should be professionally installed with a headset press that maintains correct alignment of the head cups during assembly. Headset cup diameter is Avenger OS standard (for 1 1/8" steerers).

**Bottom Bracket.** Grease bottom bracket threads and faces before installing the bottom bracket cups. Recommended torque on the fixed cup and lock-ring is 300 in/lbs. Recommended chain line is 43.5mm to 47mm.

*Caution: do not use Loctite or other thread locking compounds on the bottom bracket threads! Loctited cups require additional torque to remove, which may exceed the torque limit on the bottom bracket of your Kestrel frame. While the aluminum bottom bracket shell is molded integrally into the frame, with high torque it is possible to break the epoxy bond which holds it in place.*

**Dropout spacing.** Your CSX is molded with 135mm dropout spacing to accept current 9 speed mountain bike hubs. Do not stretch or compress your Kestrel's dropout spacing more than three (3) millimeters. As it is impossible to bend the carbon composite of your Kestrel frame, do not attempt to cold set (bend) the frame.

**Front derailleur.** The CSX uses 1 3/8" (34.9mm) hinged clamp top swing, or E-style (XTR only) bottom bracket mount derailleur. Bottom swing clamp derailleur will not fit on the tube.

### Paint

*Caution: any paint stripper which will remove polyurethane or epoxy paint will damage the epoxy resin matrix which holds your frame together. Do not use any paint stripper on your Kestrel frame.* If you decide to have your Kestrel repainted, we recommend hand sanding to remove the decals and scuff the topcoat. Do not bake over 150°F. Do not sand away any composite material. Do not sandblast, beadblast, plastic media blast, blast with walnut shells or any other media. Blasting may remove structural composite material and may weaken your Kestrel frame.