

# Composite Frame Care

## Kestrel Talon Series

### *Talon & Talon SL models*

*Congratulations on your Kestrel purchase! The carbon fiber/epoxy 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 before starting.*

### 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 round seat post only to avoid damage to the frame.** If your Talon is equipped with an aerodynamic post, you may need to remove this post and insert a round (27.2mm) seat post with the seat post adapter supplied with your frame.

**Dropout spacing.** Your Kestrel Talon series is molded with 130mm dropout spacing to accept 130mm hubs. Do not stretch or compress your frame's dropout spacing more than 2mm. As it is impossible to bend the carbon/epoxy composite of your Kestrel frame, **do not attempt to cold set (bend) the frame or dropouts.**

### Maintenance

**Seat post.** The Talon accepts either a standard 27.2mm round seat post (using the supplied seat post adapter "wedge") or the Kestrel Talon aerodynamic seat post. Minimum seat post insertion is 70mm (2.75 inches). **Maximum seat post insertion is 100mm (4 inches).** The fiberglass composite seat tube sleeve extends only this far into the frame. Depending upon the size of your 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. A standard fine tooth hack saw will work. Be certain to remove any burrs on the post before reinserting into the frame.

The Talon is different than most frames; the glass composite seat sleeve insert requires only a light film of grease during assembly and maintenance. This helps prevent the post from binding in the frame over time due to an accumulation of dirt and/or oxidation of the seat post. To work on the frame in most repair stands, you must use a standard round 27.2mm post with the seat post adapter shipped with your frame.

**Headset.** When installing a headset, grease the insides and faces of the head tube where the cups go in, as well as the crown race seat of the fork. Cups should be professionally installed with a headset press that maintains correct alignment of the head cups during assembly. Headset cup diameter is the standard 33.9mm. Crown race diameter is the standard 30.0mm.

**Bottom bracket.** Grease bottom bracket threads and faces before installing bottom bracket cups. Follow the bottom bracket manufacturer's instruction regarding installation torque.

*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.*

**Front derailleur mounting bracket.** Grease the threads of the mounting bolts before installation and make sure they are tight enough to keep the bracket from moving during front derailleur shifts. The bolts are threaded into aluminum threaded inserts, so be careful not to strip the threads. Some adjustment of the bracket position is possible by loosening the two mounting bolts and shifting the bracket relative to the frame.

**Front & rear brakes.** *You must use the long brake nuts supplied with your frame to install both front and rear brakes.* You also need to use any washers that come with your brake assemblies. The brakes may not

tighten properly without the proper washers. Contact your Kestrel dealer if you do not have the long brake nut(s).

**Cable routing.** If not purchased as a complete bicycle, your Talon frame comes with disposable lengths of “dummy” housing threaded through the top tube, down tube, and chain stay. Before you install your cables, you will need to pre-cut your cable housing to the desired lengths and attach standard housing ferrules. Here are a few suggested lengths that don't vary with frame size or components:

Short front derailleur housing near bottom bracket: 82 mm

Short rear derailleur housing under chain stay: 87 mm

Rear derailleur housing at rear derailleur: 330 mm

Your frame also comes with special cable port inserts. For derailleur cables, insert the cable through your pre-cut and ferruled housing, through a port insert, and then through the disposable housing already in the frame. Once the cable is all the way through, you may pull out the disposable housing. Slide another port insert on the cable and then the exit piece of cable housing with ferrule. Repeat for all sections of cable/housing. Note that the short piece of housing at the front derailleur does not use a ferrule at the upper cable guide, as the guide itself acts as a ferrule.

All derailleur cables should be routed using ferruled housing sections as described above; do not use continuous housing through the frame for the derailleur cables as it will result in poor shifting performance. For the rear brake cable, the routing varies depending on model and year of manufacture. Some frames, including all 2001-2002 models, require continuous housing through the top tube. Some later frames may utilize non-continuous housing (with ferrules and cable port inserts) at either end of the top tube, leaving bare cable running inside of the tube. This routing requires top tube cable port openings with a diameter of 7.0-7.5mm for proper cable port insert fit. Otherwise, continuous housing must be used for the rear brake. If you require assistance, contact your Kestrel Dealer.

*Note: if you already removed the disposable housing before reading this section, don't panic! This is how we install the housing at the factory:*

Put a 45 degree kink about three inches from the end of a piece of stiff wire (brazing rod if you have it) and feed it into the frame tube just far enough to reach the far cable port in the top tube. Twist the wire until you can see it line up with the port, and push it through. Then thread your housing over the wire and push the housing through the tube, do not pull on the wire.

**Derailleur hanger.** The Talon frames come equipped with a replaceable derailleur hanger. If the hanger is bent or damaged in any other way, it should be removed and replaced. Contact your Kestrel dealer for assistance.

## Paint

*Caution: any paint stripper which will remove 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 degrees F. Do not sand away any composite material. Do not sandblast, bead blast, plastic media blast, or blast with any other media. Blasting can remove structural composite material and could make your Kestrel unsafe.

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