

CROSSBOW BAR PRESSURE FIX (from thekiterider2000, kiteforum.com)

Sorry to have teased you guys for so long. We just had to make sure that the system worked under a few different conditions and on a few different sized crossbow kites.

I have been very frustrated as have many Crossbow users with the bar pressure. A forum acquaintance of mine (Paul from Melbourne) wrote to me recently and alerted me to the fix I have been getting quizzed about. He was also reticent to share the knowledge without firstly testing that people could understand and make the necessary changes.

If you are not confident with knots or loops and haven't played around extensively with bridles, lines etc., you should get assistance from someone who has the appropriate knowledge BEFORE making the changes listed herein.

I was so dissatisfied with the bar pressure on my 16M Crossbow that I used it very infrequently. I have a 12M Rapture 1 which is my favourite kite due to the enormous depower. Bar pressure has not been an issue with this kite due to the CC Bar setup. I purchased a 16M Crossbow thinking that as it was a newer kite it would be better than the Rapture. Elbows ached after each session. I modified an old bar incorporating a spinlock cleat which allows you to lock the bar in any position but this still did not fix the bar pressure problem. Just gave some respite while riding.

I have had an absolute Sh*tfight with my camera tonight thanks to Mr Microsoft and a recent service pack upgrade. So rather than wait any longer I have done three sketches to explain the changes needed to FIX THE BAR PRESSURE ONCE AND FOR ALL.

Essentially you will be replacing two sections of your bridle on each side of the kite with a single piece of bridle line in each case. You will also be incorporating an additional small pulley onto this new piece of bridle on each side of the kite.

This new pulley allows the pressure involved when you sheet in and out or turn the kite to be transferred and shared more equally between the front and the rear lines.

The current front line setup has a fixed attachment point which causes high pressure at lower wind speeds.

This is well documented and accepted as truthfull by all except those on the forum who like to pretend that they are tougher than most. Some respondents on the forums just call anyone who mentions the pressure a whimp or some such equally useless name. Its best to look for answers rather than just Pooh Pooh the problem.

I was concerned about the resale value of my kite as well as its usability.

You will need to purchase two Ronstan RF 13101R-2 Kite Block Pulleys or alternateively two Riley 302 Pulleys.

You will also need a few meters of spectra bridle line. Thats all.

The problem fix will costs less than \$20. (I personally think Cabrinha should send out a free retro kit)

Lay your kite on the ground and work on one side at a time. Lay out the bridle and detach the bridle lines as shown in the attached illustrations Lay them onthe ground in front of your kite in approximately the same position as they were originally placed.

Loop the two pieces of bridle together that you will be replacing and measure the overall length. Add to this measurement, sufficient line to make a loop on one end and a pigtail knot on the other.

Buy your line and pulleys.

Make a loop on one end of the new piece of line. Attach this end to the kite. Thread your pulley onto the new bridle line and tie a pigtail knot on the other end.

Reconnect the remaining bridle lines back together.

Repeat this process for the other side of the kite.

This fix really does work. The bar pressure is similar to an ordinary C Kite and I have found that my 16M turns slightly better and relaunches very easily.

This fix has been tried in a variety of wind conditions and gives the most improvement in bar pressure on a 16M kite. There is also a large improvement in the 12M model.

It has not yet been tested on a 9M Kite.

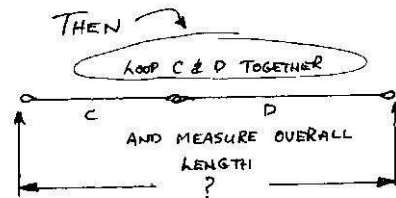
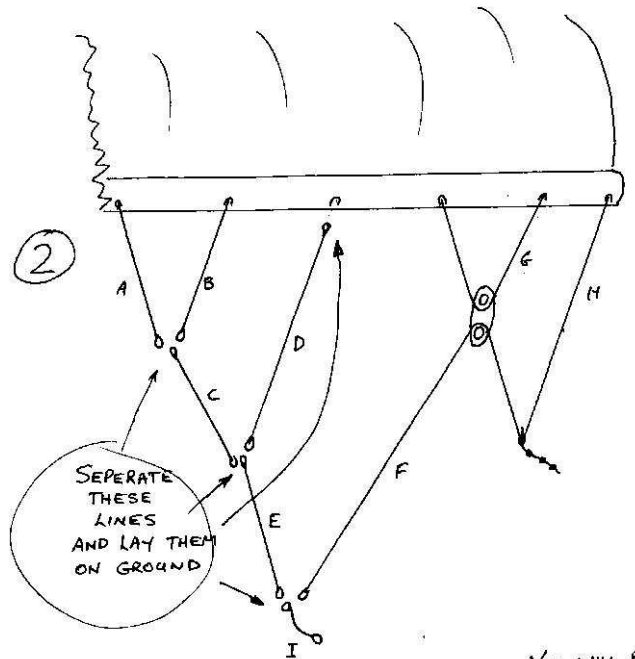
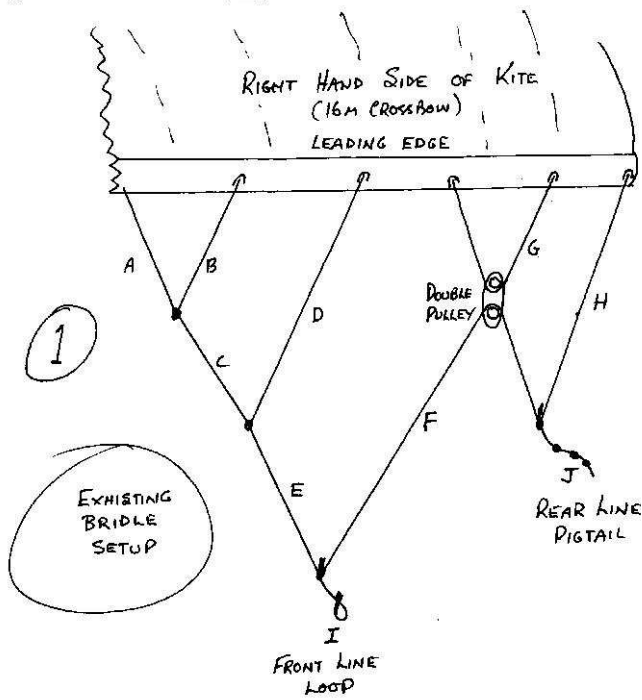
Have a look at the following sketches. Sorry for the quality but it's 12.30 am and I am dog tired.

PM me or write in this forum if you need any further info. Any resourceful young person who needs some extra cash might even benefit from making a "fix pack" to sell to their mates.

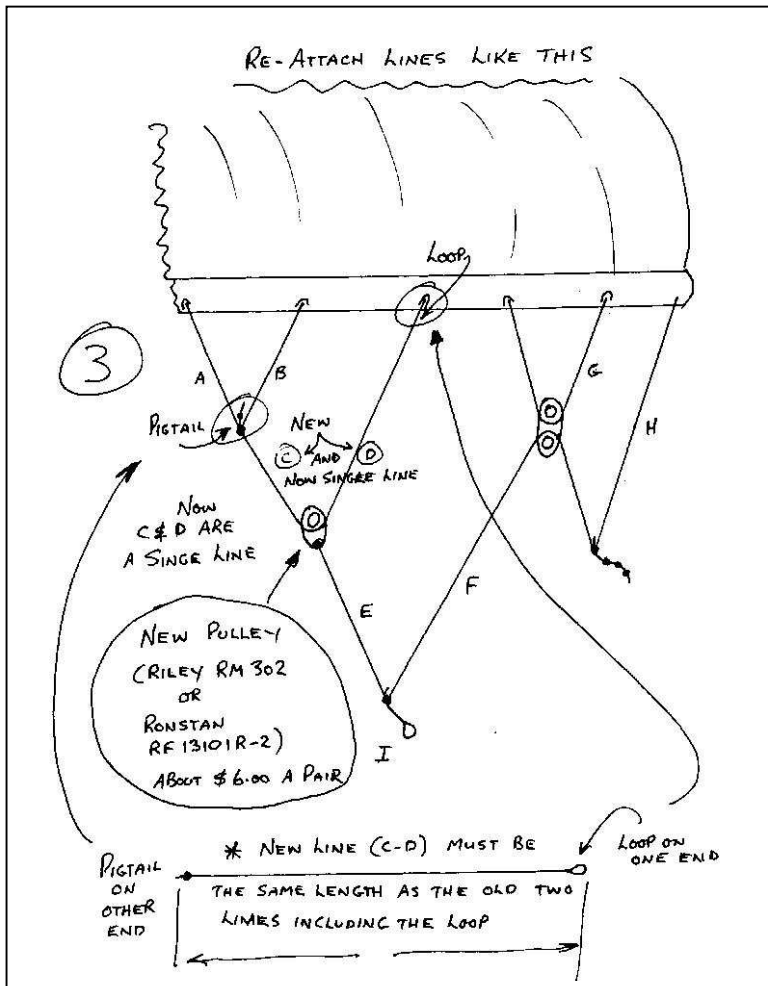
Good Luck and enjoy your Crossbow fully at last.

If you don'y like the fix just put the old pieces back and work on your forearm muscles !!!!!

Regards - Fitzy Gold Coast OZ



YOU WILL BE REPLACING C & D WITH ONE PIECE OF BRIDLE LINE



tplowe56:

I was working on this bridle modification last night & came up with a different attachment configuration that I believe is a little cleaner. You just reverse the new line you are adding, so the knot is at the LE. The photos below show the details. I am using 1/8" Amsteel dyneema from Layline, which is thicker than the original bridle material. I don't know where to purchase something identical to the original. The Amsteel is nice for splicing. Use a small drinking straw, cut a diagonal point on one end, then slice lengthwise (to make thinner), as a fid, to snake your line through the Cabrinha loop at the LE. I also included photos of my method for making a spliced loop. After making a loop you can run over it with a sewing machine to make it 100% secure. A little hand sewing would work too. I have also used these splices without sewing and never had one come undone, but you are taking an extra risk of it coming undone at the wrong time.

Thank you very much **thekiterider2000** for your research. And Kruzlifix is right this mod will create a bridle essentially identical to the Switchblade. I have both kites and was too dumb to notice this before. I have not had the time to fly my modded 16m XB, maybe after work today or tomorrow.

Connection at **A,B,C** as per kiterider2000 drawing.



New connection.



How to create a Larkshead at the LE.



Pull the Amsteel tight and you have a Larkshead.



Use a figure 8 knot in case you want to adjust or remove. Trim the end up after you are satisfied with the performance of your kite.



Creating a channel for the fid using a Samson splicing tool, (a long skinny nail would work).



Straw used as a fid.



If you are competent with a sewing machine and have the right line you could duplicate the original construction without splicing.