

# Line Set Install

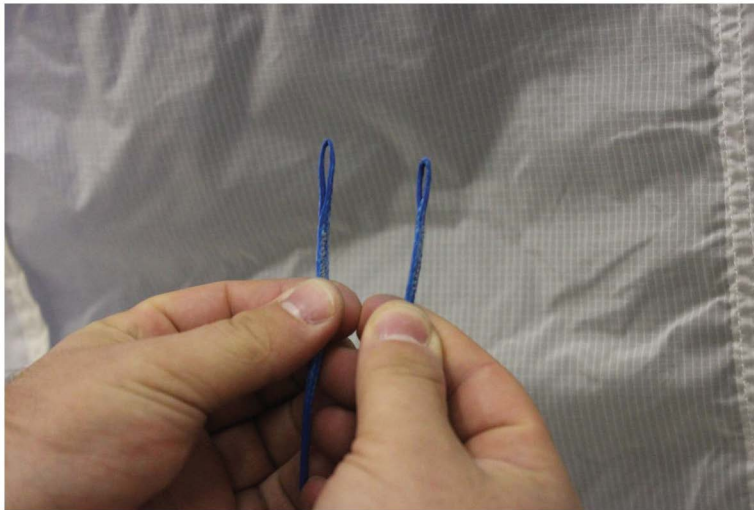
**\*We recommend reading this document in its entirety prior to starting work on your new line installation so that you may reference your currently installed lines if needed.**

As often as possible, we prefer wings be sent in to have new line sets installed. This way we can give your wing a thorough inspection and do any minor touch up work that may be needed. We do regularly shipping line sets to customers who may need minimized downtime (full time skydivers) or skydivers who are located internationally.

The method of installing lines (currently) remains the same across all of our skydiving wings, however line designations and cascade points may vary from one model to another. Below are installation instructions and line diagrams for all of our current skydiving wings.

Your new line set will arrive with lines bundled into different groups with a majority of bartacks already installed.

All of the continuous lines will have a finger trap at each end. One end will be large and the other will be smaller, as shown in Photo – 01 below. The large loop attaches to the line tabs on the wing, while the smaller loop attaches to the risers via your soft or hard links.

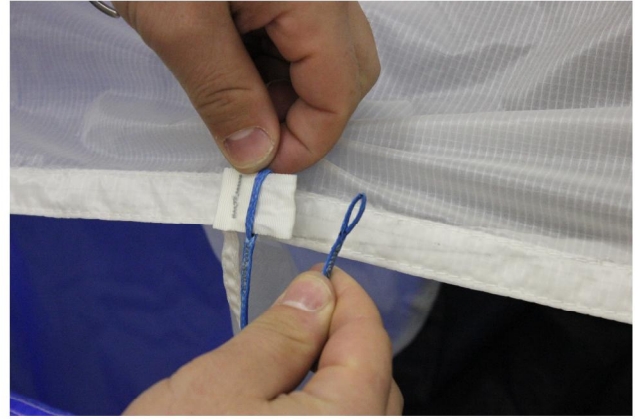


*Photo – 01*

When installing your lines, be sure that they are all installed facing the same direction. If possible, hang your wing so that you can easily verify line locations and installed direction. Fully seat your line onto your line tab, with the excess facing the nose. Then feed your excess through the line tab so that it is now facing the tail. Pull tight to set your lines onto your line tabs. Reference Photo – 02 to Photo – 06. In these examples, a continuous line is shown, however the shorter cascaded lines are installed in the same manner. If your lines are not fully seated, you may experience faster line wear, undesirable flight characteristics, and damage to your lines and/or wing.



*Photo - 02*



*Photo - 03*



*Photo - 04*

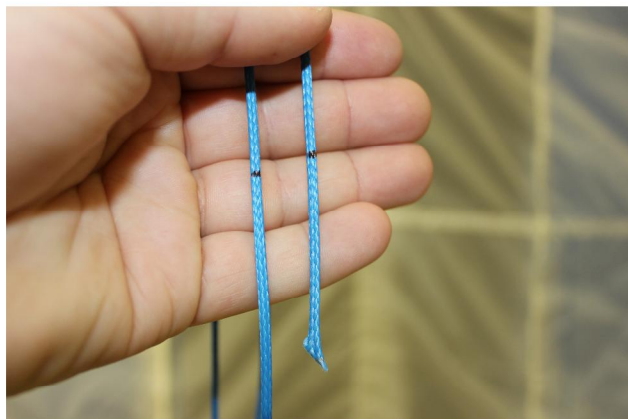


*Photo - 05*

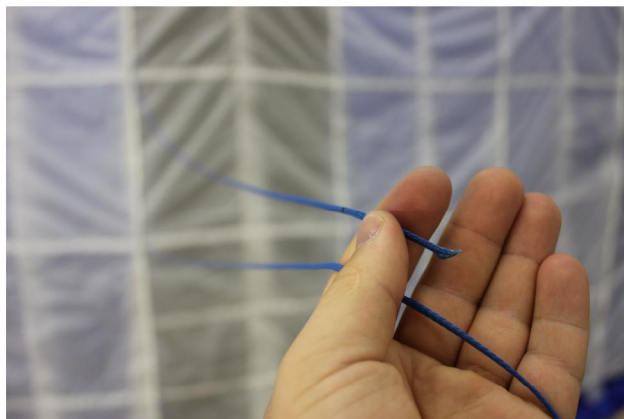


*Photo - 06*

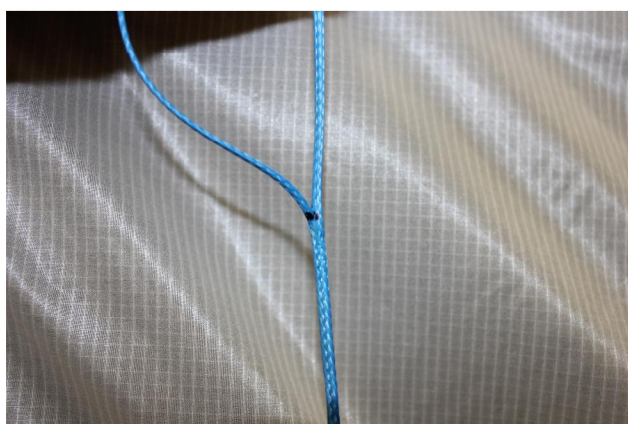
Once all your lines are installed onto your wing, it is time to fingertrap and bartack them. Both the continuous and cascade lines will have a black mark (unless other color is noted in your line set). These marks indicate the point where the cascade begins and must be properly aligned. Prior to fingertrapping them, ensure that there are no twists in either line. The excess of the cascade line will be facing away from the wing, towards the pilot.



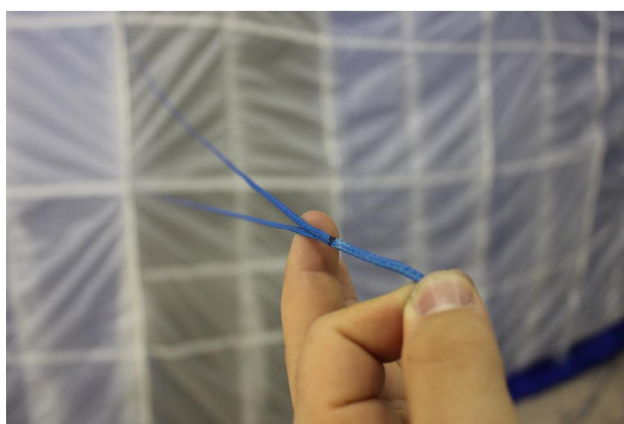
*Photo - 07*



*Photo - 08*



*Photo - 09*

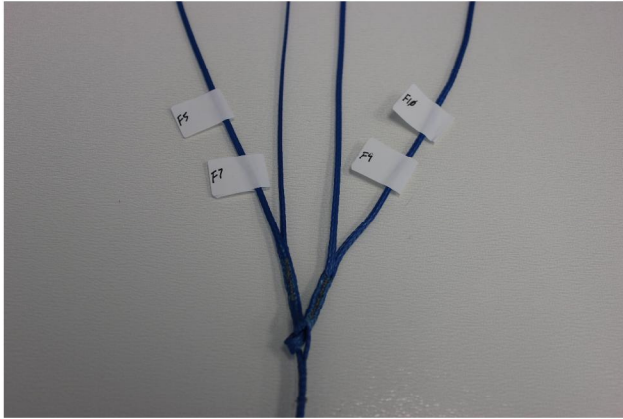


*Photo - 10*

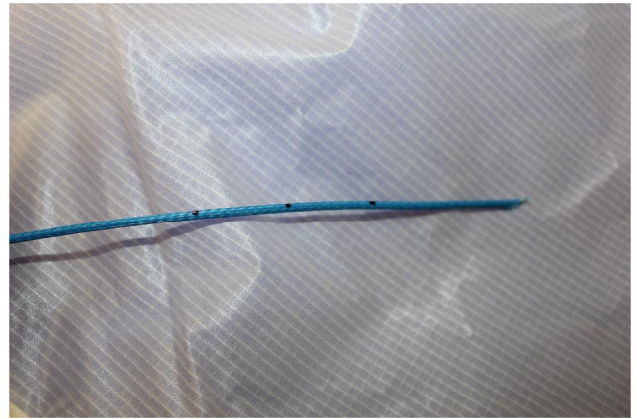
Some of our wings feature span-wise cascades. This means that, for example, one of your “C” lines will cascade into another “C” line. Reference your line chart if you have any questions, and if needed, do not hesitate to contact us directly for clarity.

Your brake lines are slightly different from all others. Upon receiving them, they should be completely assembled with the exception of the fingertraps that sit on the wing's brake line tabs. The labeling used can be slightly confusing to some as there are two labels per line. For example, you may see that you have “F10” and “F9” on one of a pair of lines, and no label at all on the other line. In this example, the labels are closest to the end of their designated line. For installation, you will notice three black dots to indicate the beginning, center, and end of each fingertrap. Prior to fingertrapping, pass the end of the line through the corresponding brake line tab, then form the fingertrap looping around the line on the initial side of the brake line tab. Reference photos 11-16 for clarity.





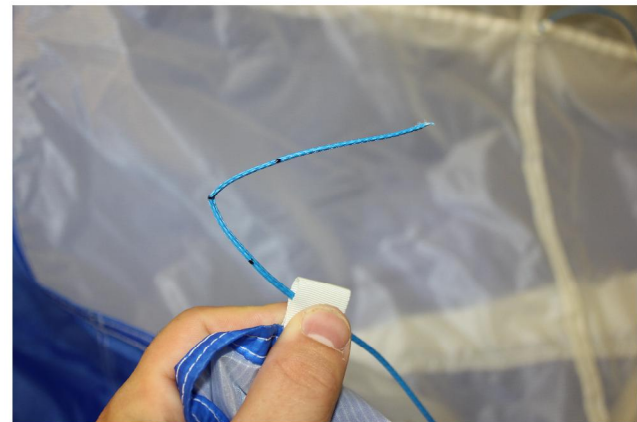
*Photo – 11*  
In this example, starting from left to right are brake lines F5, F7, F9, F10



*Photo – 12*  
These three dots indicate the beginning, center, and end of the fingertrap



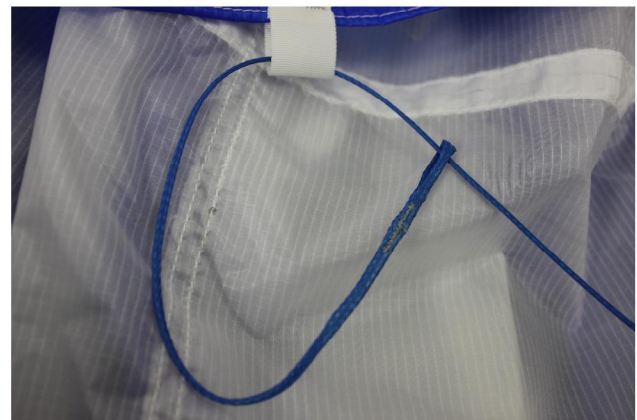
*Photo – 13*



*Photo – 14*



*Photo – 15*

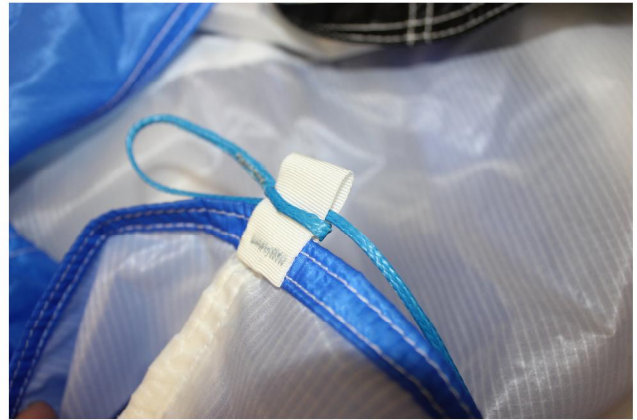


*Photo – 16*

After completing and bartacking the brake line fingertrap, it needs to be seated on the line tab the same as all the other lines. Simply slide the loop onto the tab and pull tight.



*Photo – 17*



*Photo – 18*



*Photo – 19*

Now that your lines are all installed, the only thing left to do is measure them to verify they are within tolerances. A line check sheet should be included with your lineset. The continuous lines were measured prior to shipping, so all that you need to measure is the difference between your continuous and cascaded lines. All of our measurements are in metric and the numbers indicated on the check sheet are in centimeters. These numbers are measured from the center of the bartack on the line tabs. Moving horizontally across the page, the numbers aligned with the cascaded line is the difference between the two lines that needs to be verified. For example, if “5.4” is the difference listed for 2B, you must put equal tension on 2B and the line it is cascaded to (likely 2A), then measure from the center of the bartack on the 2A line tab to the center of the bartack on the 2B line tab. All tolerances for lines are  $\pm 3$  millimeters. Continuing the example, if the difference for 2B is 5.4, then it can be anywhere between 5.1 to 5.7. Ensure that your lines are properly set to prevent incorrect measurements.

**\*Prior to using your new lineset, we recommend the USER thoroughly inspect that all bartacks are installed. Regardless of wing model or manufacturer, it is the opinion of Fluid Wings that any time you are using new equipment or your equipment has been out of your possession it is given a detailed inspection to ensure it meets all legal and personal safety standards prior to use.**

Congratulations, you've installed your new lines! Once again, if you need any clarity on these instructions, do not hesitate to contact us. All feedback is welcome and appreciated as we strive to excel in customer and product support!