

# 2011 KITE MANUAL

*SANTA CRUZ*

**SPITFIRE | ZOMBIE | MAYHEM X**

*SANTA*

CAUTION

# WARNING AND SAFETY PRECAUTIONS



## WARNING:

KITE FLYING IS A POTENTIALLY HAZARDOUS SPORT

## WARNING:

MIS-USE OF THIS PRODUCT CAN LEAD TO SERIOUS INJURY OR DEATH

## WARNING:

YOU, ALONE, ARE RESPONSIBLE FOR YOUR SAFETY AND THE SAFE OPERATION OF YOUR EQUIPMENT



### RELEASE OF LIABILITY, CLAIM WAIVER AND ASSUMPTION OF RISK AGREEMENT

By inflating the leading edge and assembling this product, you are agreeing to be bound to the terms set forth below, requiring any one using this product to be bound by such terms. If you are unwilling to be bound by these terms, return this product (before use) for a full refund.

### ASSUMPTION OF RISK

Use of this product and any of its components involves certain inherent risks, dangers, and hazards, which can result in serious personal injury or death. In using this product you may freely agree to assume and accept all known and unknown risk of injury while using this equipment. The risks inherent in this sport can be greatly reduced by abiding by the warning guidelines listed in the users guide, taking lessons from a certified kitesurfing school and by using common sense.

### RELEASE AND WAIVER OF CLAIMS AGREEMENT

In consideration of the sale of this product, you hereby agree to the following to the fullest extent permitted by law:

To waive any and all claims that you have or may in the future have against Caution Santa Cruz, or any of its agents, resulting from use of this product and any of its components.

To release Caution Santa Cruz, or any of its agents, from any and all liability for any loss, damage, injury, or expense that you or any users of this product may suffer as a result of the use of this product, do to any cause whatsoever, including negligence or breach of contract on the part of Caution Santa Cruz, or any of its agents, in the design or manufacture of this product.

# EQUIPMENT CARE GUIDELINES

- Wash kites with fresh water and dry after every session
- Make sure the rigging area is smooth and free of sharp debris
- Do not over inflate, 6 PSI is sufficient for highest performance
- Always conduct a routine Preflight Inspection
- Remove all valves when kite is not in use
- Do not leave struts inflated when kite is not in use
- Do not leave kites outside where they might receive excessive sun exposure
- Find a cool and dry place for extended periods of storage
- Do not expose to excessive temperatures, particularly hot cars and space cases
- Control bar and lines should be rinsed after every session
- Make sure pigtails are clean before attaching lines; sand can cause early wear

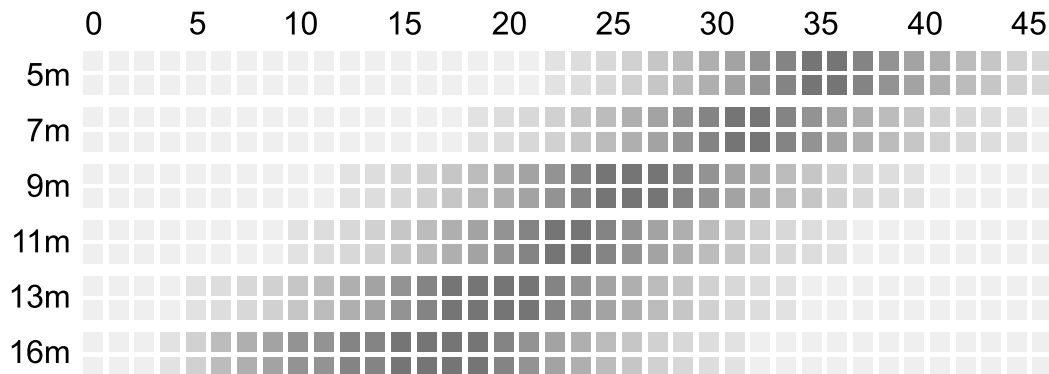
# PRE-FLIGHT INSPECTION

- Make sure your are using the correct Caution bar with appropriate safety systems
- Always use a kite leash to prevent accidental loss of kite
- Check all lines during set-up for knots and abrasion - if either is found replace immediately
- Make sure all inflation valves are properly seated in leading edge and struts
- Check all pigtails for wear and abrasion
- Check canopy and leading edge for cuts or abrasions
- Make sure leading edge bridals are clear of tangles or wraps
- Make sure the quick release is properly functioning and clear of sand or debris
- Make sure the safety leash is not tangled or wrapped around other items on the bar

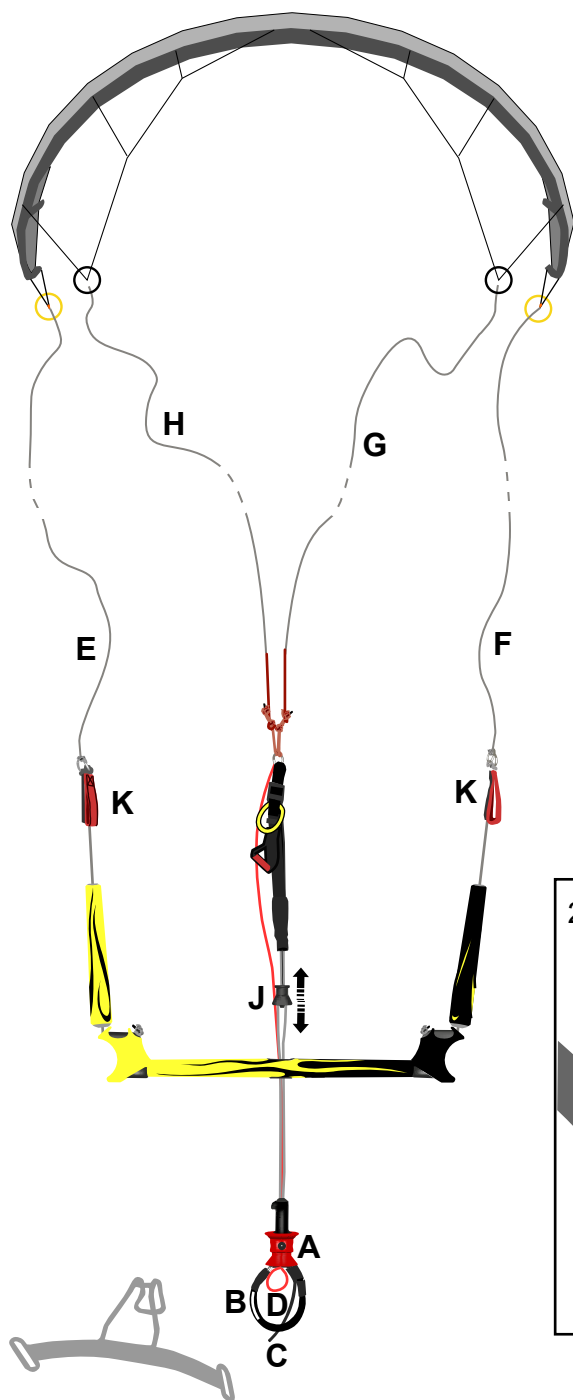
# WIND RANGE CHARTS

Wind ranges are provided as a rough estimate of appropriate kite size for wind strength for a 165lb rider. Rider size, wind strength, board size, and skill level are important factors in selecting the correct quiver. Feel free to contact our sales team for sizing assistance.

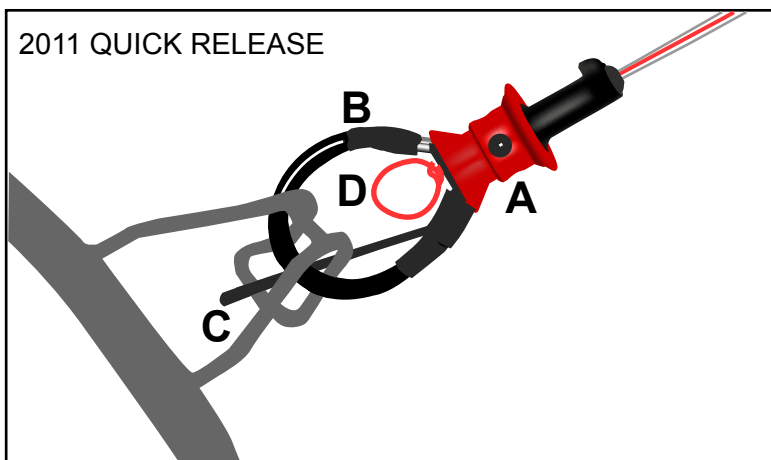
## 2011 SPITFIRE RANGES



# RIGGING GUIDELINES

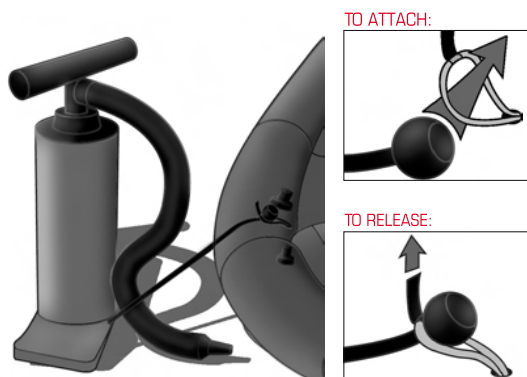


- A Quick-release body**
- B Trim loop**
- C Angry inch**
- D Leash attachment loop**
- E Left YELLOW steering line**  
attaches to YELLOW pigtail on trailing edge
- F Right BLACK steering line**  
attaches to BLACK pigtail on trailing edge
- G Right RED center line**  
attaches to bridal on leading edge
- H Left RED center line**  
attaches to bridal on leading edge
- I Power adjustment strap**
- J Slider stopper ball**
- K OS safety release**



# RIGGING GUIDE

## STEP 1: INFLATING KITE



**SECURITY:** Always use the pump leash to prevent your kite from blowing away. Make sure the dime sized dump/deflation valve is closed and secured.

**INFLATE:** Attach pump to inflation valve on the leading edge and pump until all struts and leading edge are firm. Over inflation does not improve kite performance. Some struts may take a few seconds to inflate, this is normal and will stop after a few times.

**DEFLATE:** Pull the dime sized deflation valve and roll from each wingtip towards the center of the leading edge.

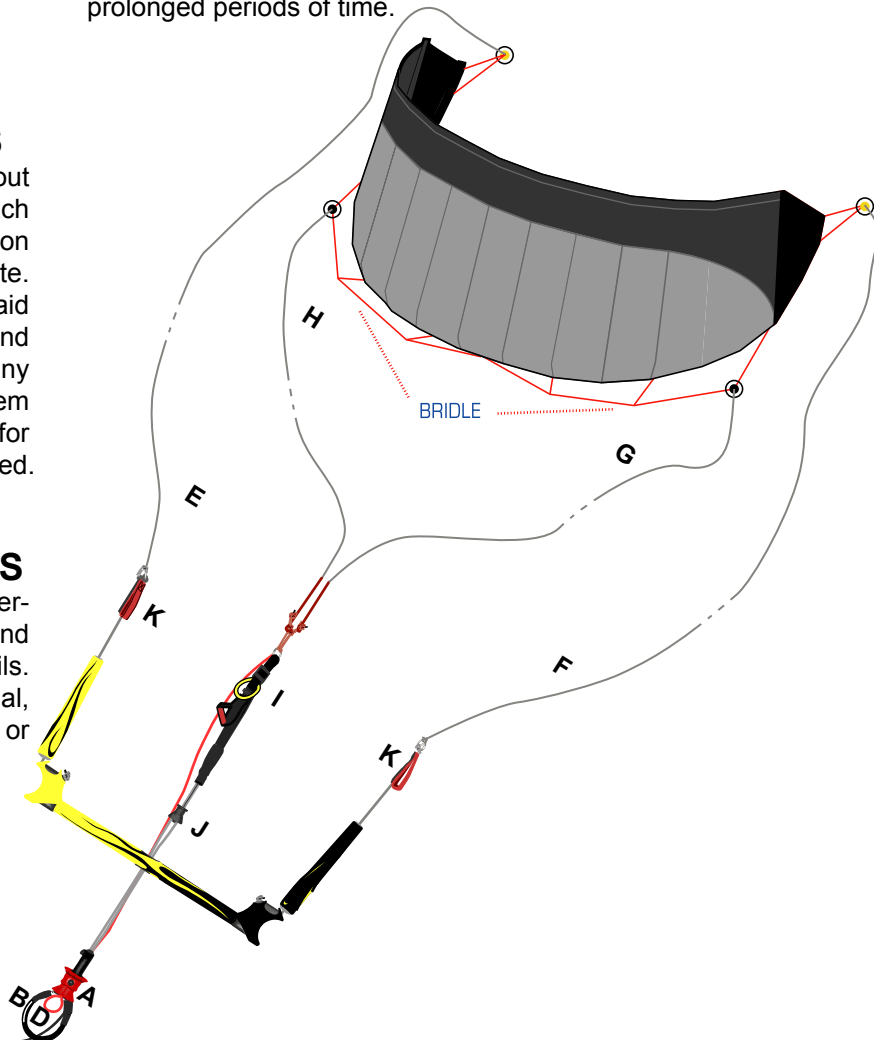
**INFLATION PRESSURE:** Inflate your kite to the level of firmness. Be careful not to leave your kite inflated in direct sunlight for prolonged periods of time.

## STEP 2: CLEARING LINES

Take the bar upwind of the kite and layout the lines, separating each line from each other. Place the yellow side of the bar on the left as you look downwind at your kite. Double check that the lines are clearly laid out, making sure the lines are straight and not wrapped, knotted or tangled in any way. Take the front bridals and pull them and their pulley out in front of the kite for visual confirmation that nothing is tangled.

## STEP 3: ATTACHING LINES

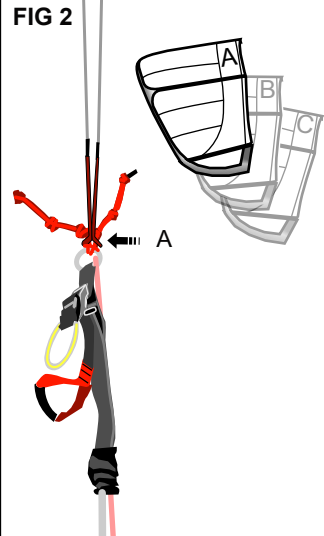
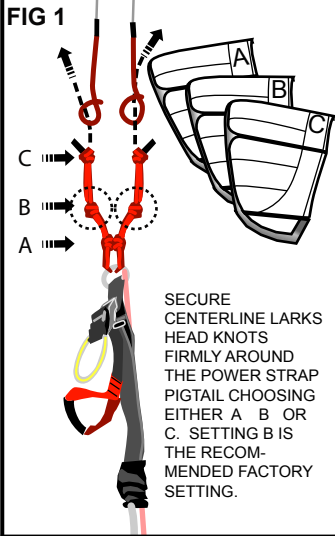
Start with the **YELLOW** and **BLACK** steering lines, taking them out to the side and attach to the trailing edge bridal pig-tails. Attach the center lines to the front bridal, making sure the bridals are not tangled or wrapped with themselves.



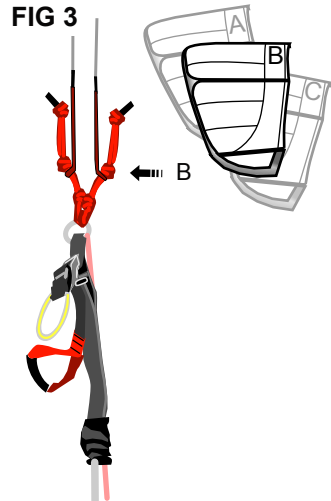
# TUNING GUIDE

Tuning the power of a kite is relatively straight forward because there are two variables you can change, the effective length of the center lines and the effective length of the steering lines.

## TUNING CENTER LINES



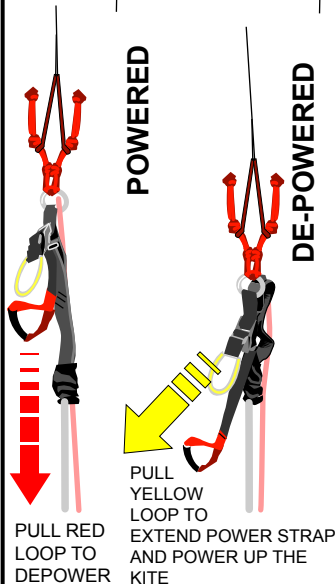
### RECOMMENDED SETTING



## POWER STRAP

FULL POWER

DE-POWERED



### DECREASES POWER

The kite will be more depowered when your arms are out stretched. The kite will fly at optimum trim while the control bar is close to the quick release. Ideal for unhooked riding.

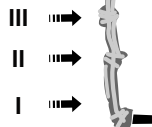
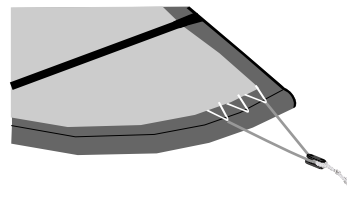
### RECOMMENDED

This is the stock setting and will allow you to be fully powered when your arms are in a comfortable position, while giving you a good amount of depower room above the bar.

### INCREASES POWER

This setting powers up the kite so that when your arms are out stretched the kite is fully sheeted. It may reduce the bar's depower ability and it can make the kite prone to overshooting / stalling in light conditions

## TUNING STEERING LINES



### III SHORTEST SETTING

Using the top knot on the rear pigtail attachment gets the most power out of the kite. Kite may be more prone to overshooting.

### II MIDDLE SETTING

Using the middle knot on the rear pigtail attachment gives you increased power and without the risk of excessive overshooting.

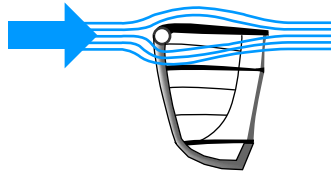
### I LONGEST SETTING

Using the bottom knot on the rear pigtail attachment will get you the best compromise between power and depower.

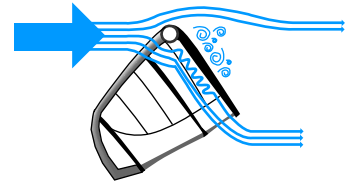


# OVERSHEETING / STALLING

Over sheeting is a term used in kiteboarding when a kite's angle of attack is closed off at such a dramatic angle that the kite loses air flow and stalls, often times gravity will pull the kite backwards towards the ground. Intermediate and advanced riders typically can feel a stall occurring and often release tension on the bar (push bar away from rider) to regain air flow over the foil and prevent the stall's loss of power. If you are having a problem with overshooting, see the tuning guide on the previous page. Start by pulling in your power strap. If that isn't enough try setting your center lines to A and your rear steering lines to I. If you need more power begin by moving the steering lines up to the II or III setting.



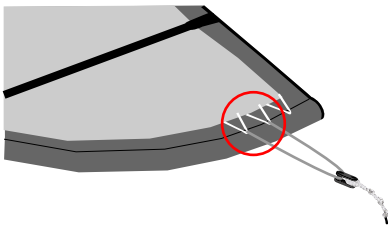
**GOOD**



**BAD**  
(OVERSHEETED STALL)

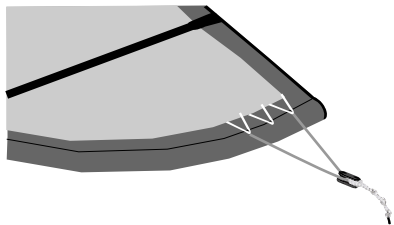
# REAR BRIDAL SETTINGS

## SLOWER SETTING



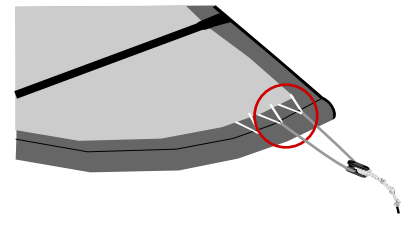
By moving the rear bridging attachment forward, you can slow the turning response of the kite and change the sheeting characteristics. Attaching bridging ends to adjacent webbing mounts lengthens the bridging, and it is recommended to use the III position on the rear pigtail and / or setting C on the power strap to compensate.

## STOCK SETTING



The stock bridging setting uses the widest spread between the webbing attachment points. This setting offers riders the ideal balance between turning speed, steering response and smooth sheeting dynamics. This setting works well for both free-riding, wave riding and freestyle.

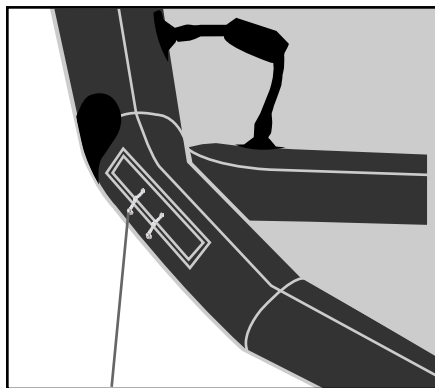
## FAST SETTING



By moving the forward bridging attachment backwards, you can speed up the turning response of the kite and increase the responsiveness of the sheeting characteristics. Attaching both ends to adjacent webbing mount lengthens the bridging, and it is recommended to use the III position on the rear pigtail and / or setting C on the power strap to compensate.

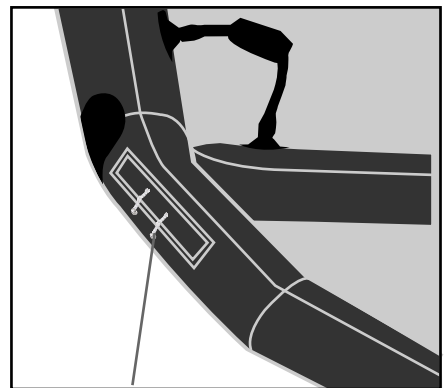
# FRONT BRIDAL SETTINGS

## STOCK SETTING



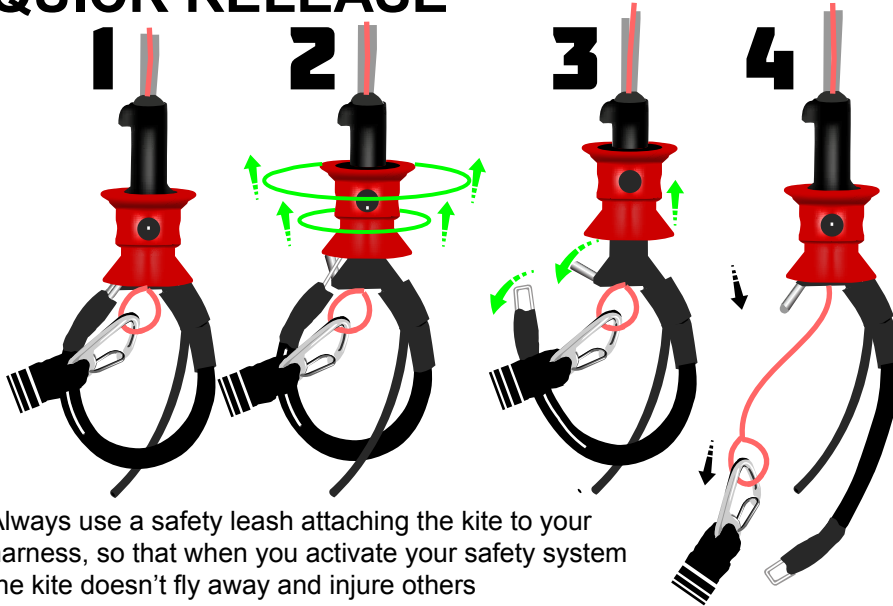
The stock setting uses the forward attachment point, which pushes the effective bridging balance point forward while offering the fastest turning dynamics, largest amount of range and smooth handling characteristics.

## FORWARD SETTING



Riders can choose to move the front bridging attachment back shifting the effective position of the front bridging balance point back. This will decrease the bar pressure and it will decrease the range of the kite and deliver a more C-kite style performance.

## QUICK RELEASE

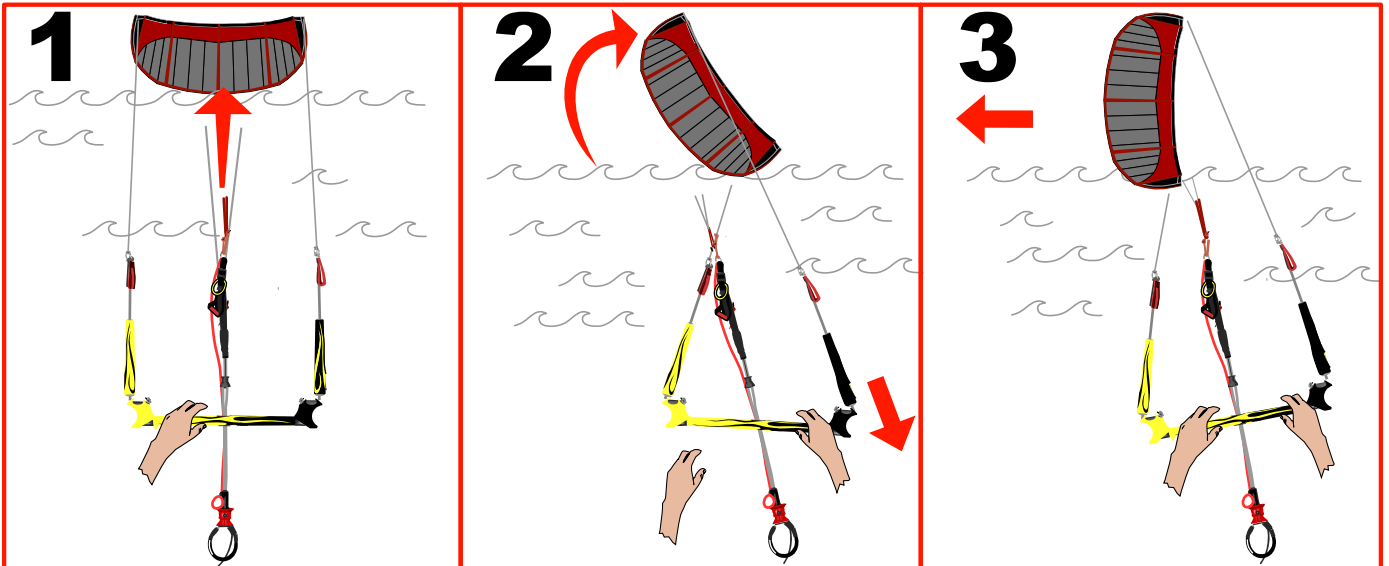


Always use a safety leash attaching the kite to your harness, so that when you activate your safety system the kite doesn't fly away and injure others

- 1 Good to go, with trim loop locked in, red release is spring tensioned in place
- 2 Grab red release handle and push upward against spring tension to initiate release
- 3 Trim loop pin is released and allows left side of trim loop to release and disengage from harness
- 4 Let go of bar, and rely upon your safety leash to depower the kite and make sure it doesn't get away from you

## WATER RELAUNCH

If the kite crashes on a side of the window, the kite will automatically flip into launching position, moving towards neutral. Apply pressure to the side of the bar corresponding to the upward tip of the kite. Once the kite leaves the water do not overshoot the kite (AKA: pull the bar in all the way). When the kite is relaunching the additional water draining off the canopy adds weight to the kite, and aggressive sheeting or steering can cause the kite to stall and fall backwards into the water.

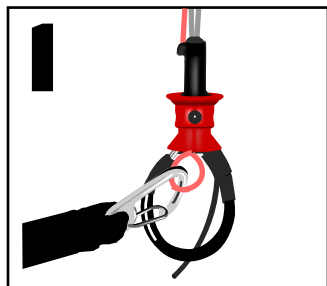


## DEAD DOWNWIND RELAUNCH

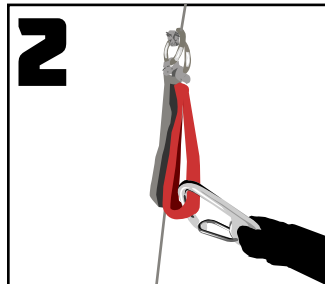
If the kite is straight downwind of you, with the leading edge on the water, you can pull hard on one side of the bar, you may also grab the leader line to get extra tension. As you maintain tension, the kite will shift to the side of the window, roll on its side and work its way to the edge of the window. From there it will relaunch easily. Make sure that you never wrap the line around your hand and be careful not to become entangled in any slack line.



# SAFETY LEASH OPTIONS

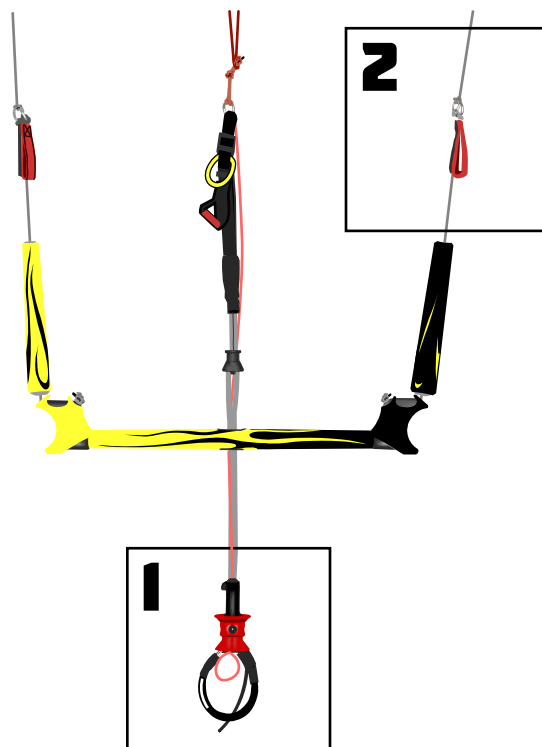


OR



Attach your safety leash to the red loop just below the quick release handle. Upon triggering the safety system the trim loop will release from your harness, the rider will release the bar, and the kite will depower along the two center lines.

Attache your safety leash to the OS webbing loop on either outside steering line. (do not attache to stainless rings) Upon triggering the safety system the trim loop will release from your harness, the rider will let go of the bar, and the kite will depower along the outside steering line.



## WARRANTY INFORMATION

Every Caution product is subjected to rigid pre-sales quality control tests and is backed by our comprehensive warranty policy below.

### WHAT THIS WARRANTY COVERS

#### Generally:

Caution Kites warrants this product to be free of major defects in materials and workmanship when this Product is used for ordinary recreational activities by the original purchaser for a period of 90 days from the original date of purchase (as evidenced by the relevant purchase receipt) subject to the following terms and conditions.

#### Specific Product Warranties:

This warranty is valid only when the warranty card accompanying the Product is properly filled out and returned to Caution kites within seven (7) days from the original date of purchase.

#### Important Notice:

This Product is designed for, and is intended to be used by the purchaser for ordinary, recreational purpose, or use only. This Product is not designed for commercial use where it is subject to continuous or high volume repetitive usage over an extended period of time.



**WARRANTY INFORMATION CONTINUES ON NEXT PAGE**



# WARRANTY INFORMATION

## WHAT THIS WARRANTY DOES NOT COVER

This WARRANTY does not cover the following:

- Costs of return shipments to Caution Kites
- Damage caused by alterations, modification or changes not authorized or approved by Caution Kites in writing, or due to service and/or repairs done by anyone other than Caution Kites or a Caution Kites authorized repair facility, or due to accident, abuse, misuse or improper use, neglect, or failure to perform normal maintenance in accordance with the instructions set out below or in the user's manual, available at [www.cautionkites.com](http://www.cautionkites.com).
- Damage Caused by extended or excessive exposure to sunlight (or ultraviolet radiation), improper handling or storage, or failure to follow instructions in the user manual
- Damage caused by anything other than defects in materials or workmanship.
- This Product when being used commercial, rental, teaching or instructional programs or activities or in competition of any kind.
- This product when being classified as second-hand.
- Consequential and incidental damages or expense, including damages to property or for personal injury.
- Damage caused by any use of this Product as a toy.
- Damage caused by the use of this product in waves or shore break.
- Damage caused by the over-inflation of the bladders.
- Normal wear and tear, including scratches, punctures, rigger with components other than Caution components.

## LIMITATIONS ON IMPLIED WARRANTIES

All warranties implied by State Law, including the implied warranties of merchantability and fitness for a particular purpose, are hereby limited to the duration of this warranty. Some States do not allow limitations on how long an implied warranty lasts, so the foregoing limitation may not apply to you. With the exception of any warranties implied by state law (as hereby limited), this Warranty is exclusive and in lieu of all other warranties, guarantees, representations, agreements and similar obligations of manufacturer or reseller. This Warranty gives you specific legal rights, which vary from state to state.

## HOW TO MAKE A WARRANTY CLAIM

Caution Kites will make the final and conclusive determination in relation to each claim under this Warranty on a case-by-case basis, which may require inspection and/or photos of this Product which clearly show the defect(s), if any. This information must be sent to the Caution Distributor of this Product in your country, postage prepaid (or via your local authorized Caution Kites Dealer). This Product can be returned only if the Caution Kites Distributor, in advance of returning this Product, gives a return authorization number (RA). The RA number must be clearly labeled on the outside of the package, for a refund of the purchase price of this product only (which alternative and/or the appropriate amount, if any, shall be decided by Caution Kites at its sole and absolute discretion.) CautionKites will not be responsible for any costs, losses, or damages incurred as a result of loss of use of this Product.

THE ORIGINAL PURCHASE RECEIPT MUST ACCOMPANY ALL WARRANTY CLAIMS. THE NAME OF THE RETAILER AND THE DATE OF PURCHASE MUST BE CLEAR AND LEGIBLE ON SUCH RECEIPT.



**WARRANTY INFORMATION CONTINUES ON NEXT PAGE**



# **WARRANTY INFORMATION**

## **HOW TO KEEP THIS WARRANTY IN EFFECT**

The Warranty is voided if any unauthorized repair, change, alteration or modification has been made to any part of this product. The warranty for any repair or replacement product (as the case may be) is good from the date of the original purchase only. There are no warranties, implied or otherwise, which extend beyond the warranty specified herein.

## **WARNING**

IT IS THE USER'S RESPONSIBILITY TO CAREFULLY READ THE ATTACHED USER'S GUID AND INSTRUCT ALL USERS ON THE PROPER USAGE AND MAINTENANCE OF THIS PRODUCT

## **ADDITIONAL RIGHTS**

This Warranty does not affect, and is in addition to any statutory rights that you may have under or by virtue of any applicable law.

## **HOW TO OBTAIN WARRANTY SERVICES**

To obtain warranty service for this Product, or if you have any questions about any product of Caution Kites or their respective user's instructions, please visit [www.cautionkites.com](http://www.cautionkites.com). or [info@cautionkites.com](mailto:info@cautionkites.com), or contact your local Caution Kites Distributor.

**THANK YOU FOR CHOOSING CAUTION !**