

WINDWING

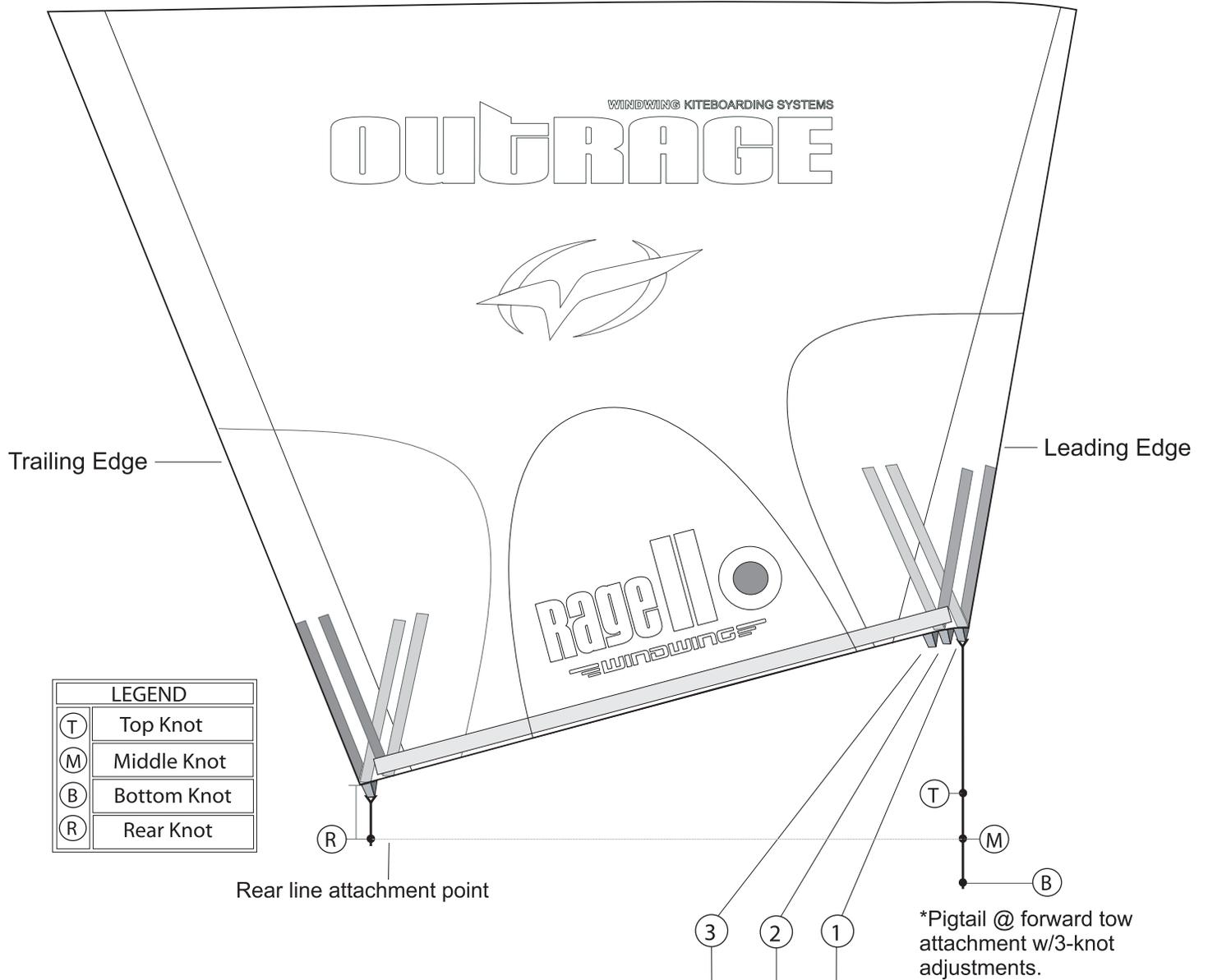
User's Manual



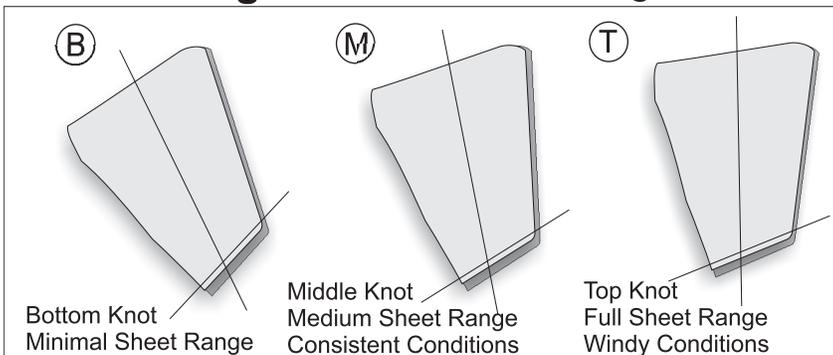
"B" SAFE BAR "CC" CRUISE CONTROL BAR

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Fixed Attachment Points for RAGE II and OUTRAGE



AOA Angle of Attack Front Pigtail Knots



3 2 1

Forward attachment gives the kite the most sheeting range, good for gusty conditions.

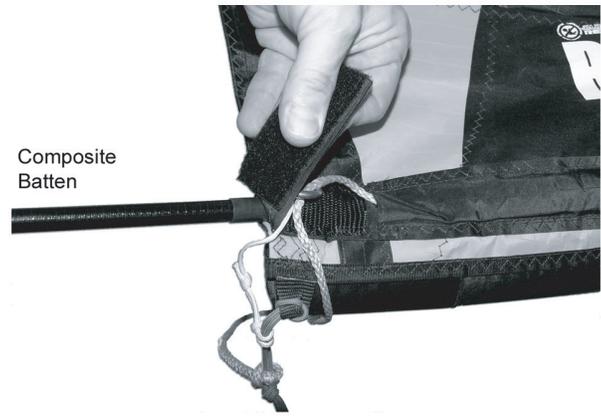
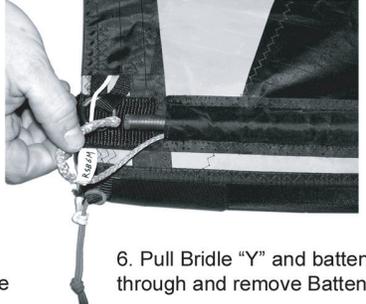
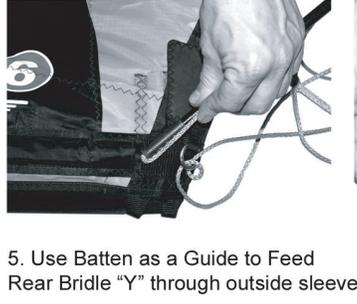
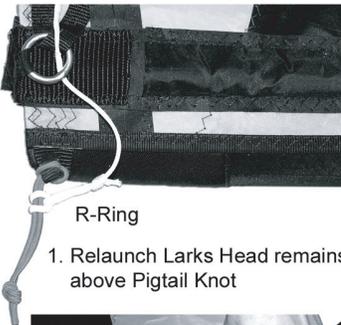
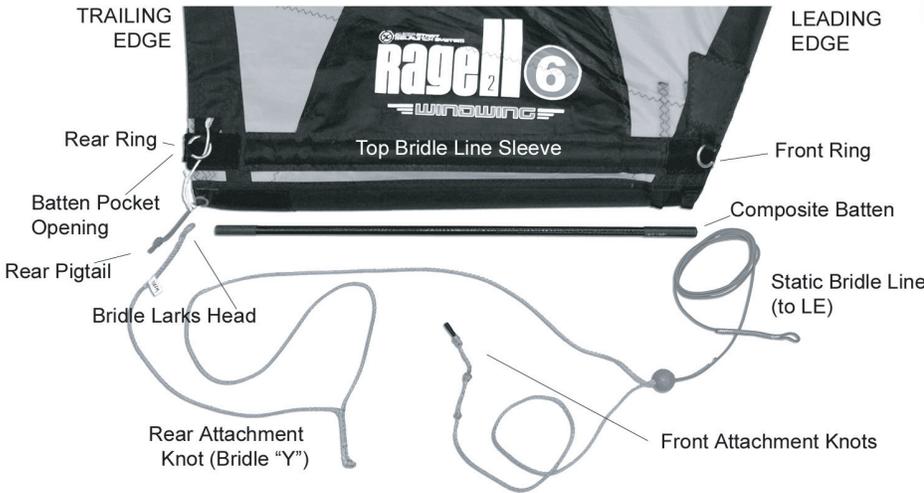
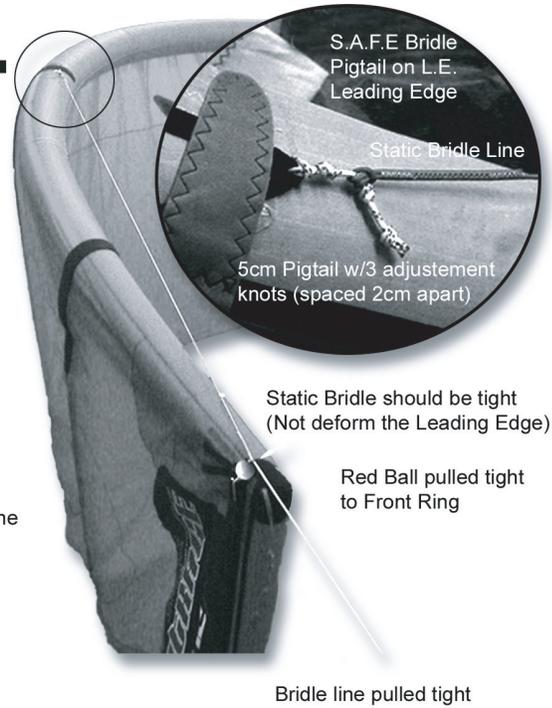
Mid attachment gives the kite a consistent feel with adequate sheeting range.

Aft attachment is a powered-up position good for consistent winds.

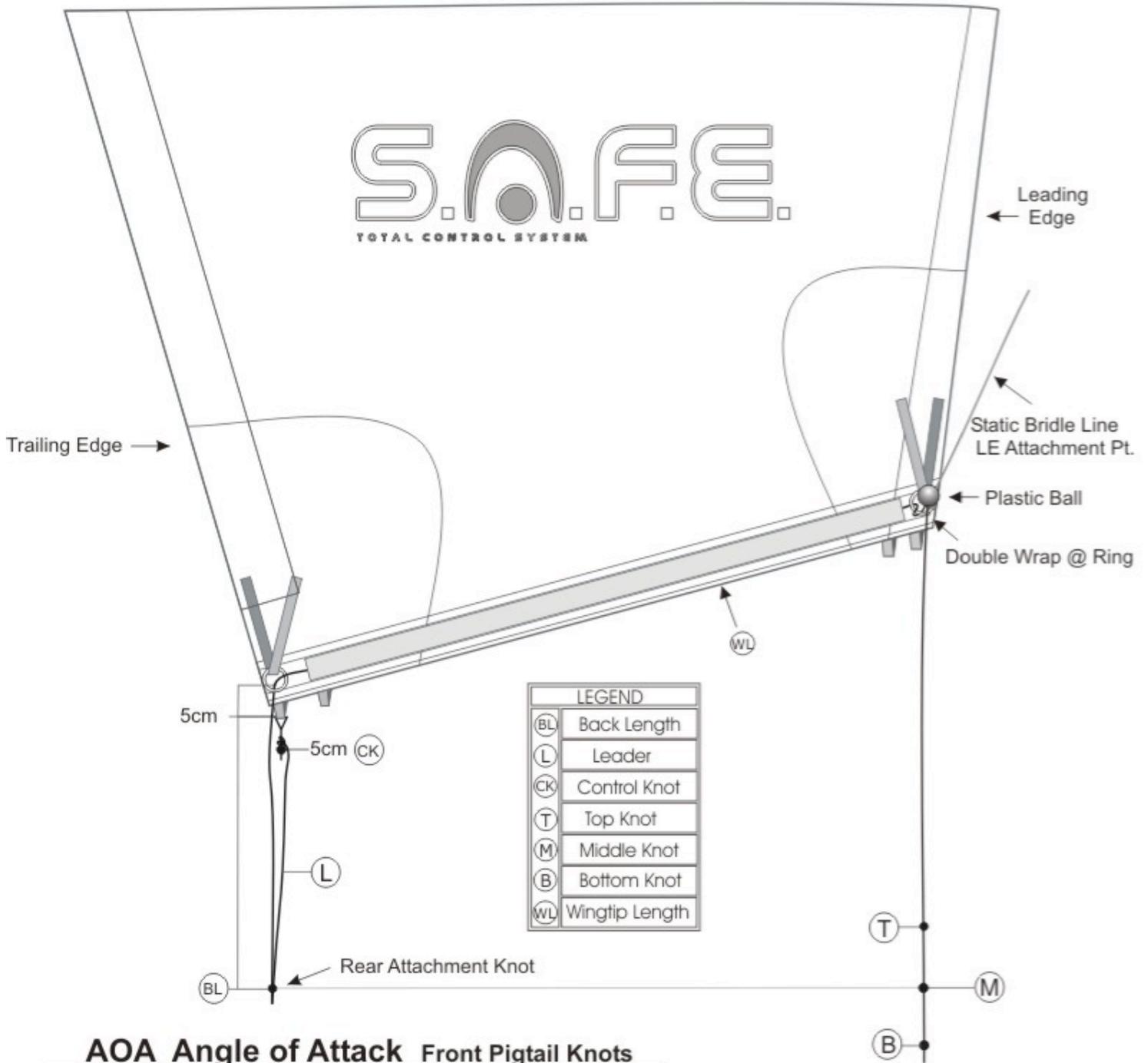
Bridle Installation S.A.F.E.

TOTAL CONTROL SYSTEM

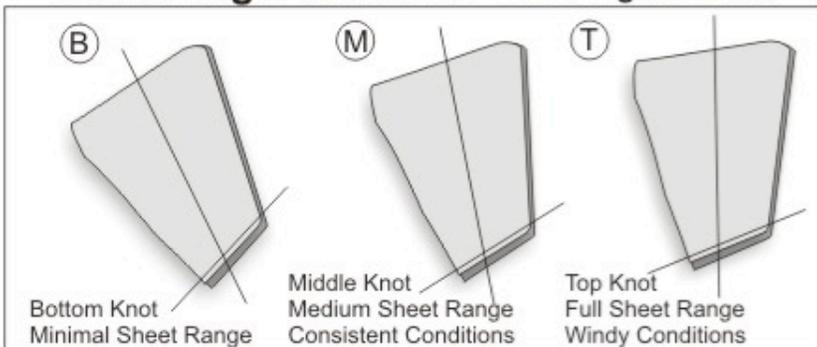
Installing the S.A.F.E. system will give you the opportunity to understand the function and importance of this unique product. We are please that you chose Windwing and wish you many hours of fun and pleasure . Please refer to www.windwing.com for more information.



S.A.F.E BRIDLE. Attachment Points



AOA Angle of Attack Front Pigtail Knots



Static Bridles

Front Views

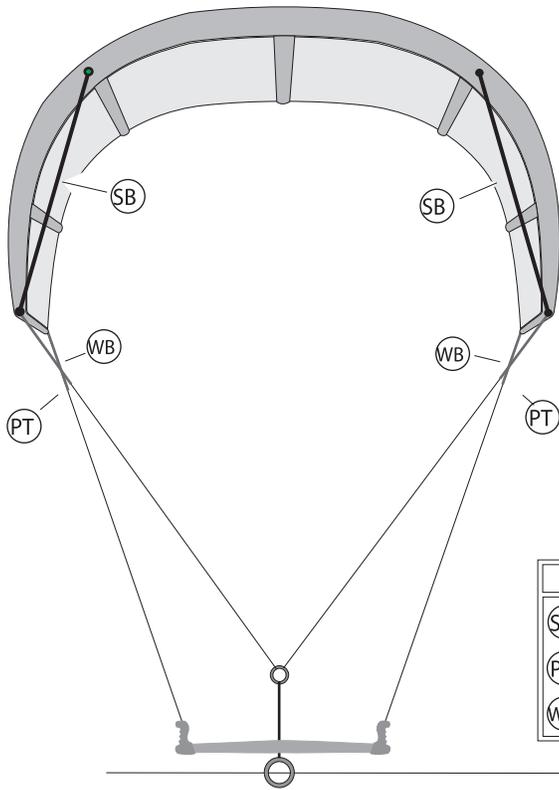


Fig.1 Powered

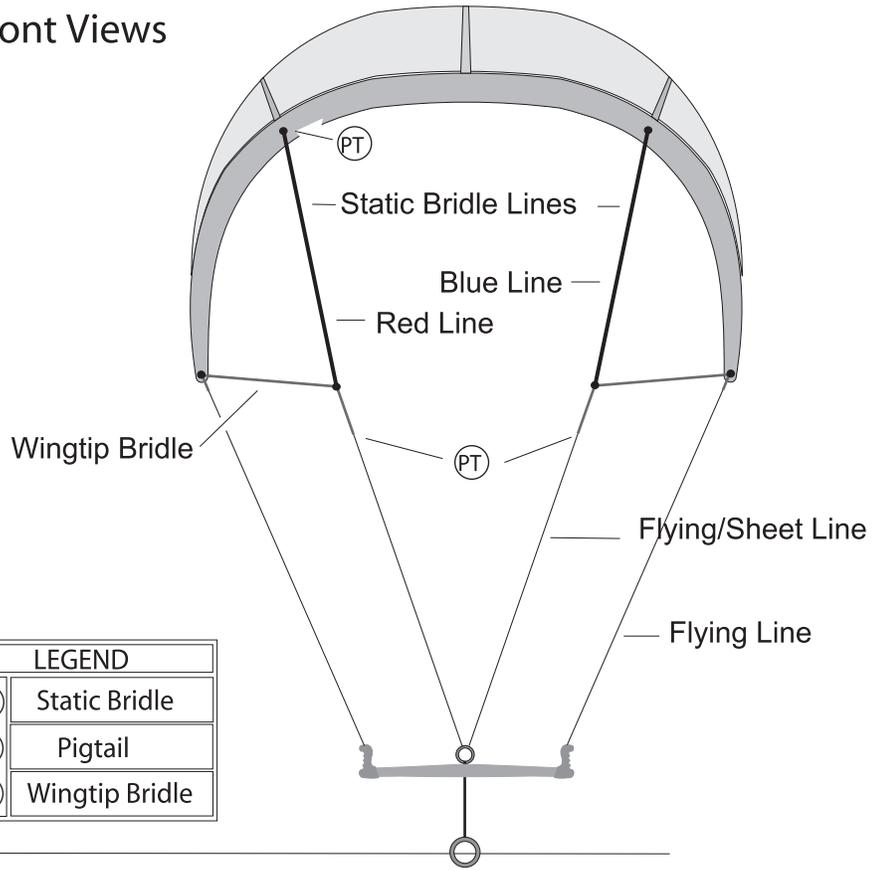


Fig.2 De-Powered

LEGEND	
(SB)	Static Bridle
(PT)	Pigtail
(WB)	Wingtip Bridle

Once Wingtip and Static Line Bridles are Installed

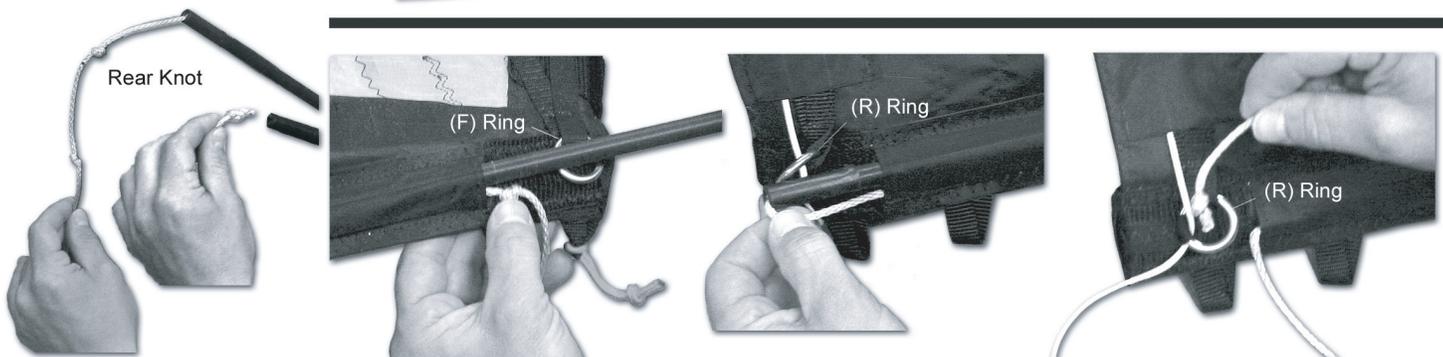
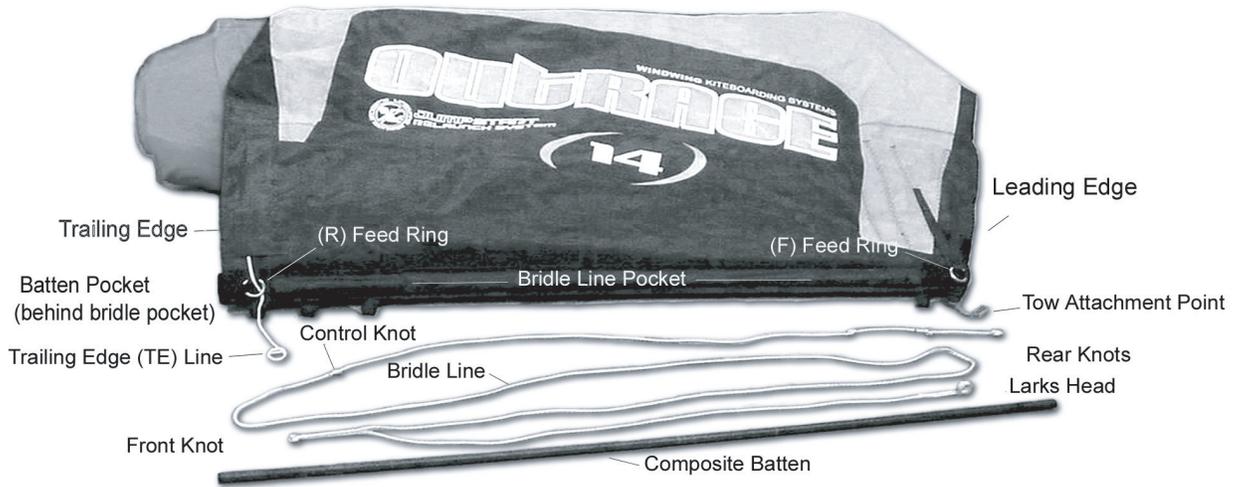
1. Check tension at rear and front wingtip bridles. When static leader and rear bridle lines are pulled tight, the plastic ball should pull-back and stop at front ring.
2. When both front and rear wingtip bridles are pulled equally together, the static bridle line should have a minimal amount of tension. The static line should not pull the plastic ball away from the front ring when wingtip bridle is pulled tight.
3. If adjustment of the static line is necessary, use pigtail with knots provided at the leading edge. When adjusting static line always make sure both sides are exactly the same.
4. Once both wingtip and static lines are in place, then test fly the kite to insure you have correctly installed the SAFE system bridle.
5. **NOTE:** When test flying, if kite begins to back-fly, static bridle line is too tight. Move lark's-head down a knot at pigtail on the LE.

Bridle Installation

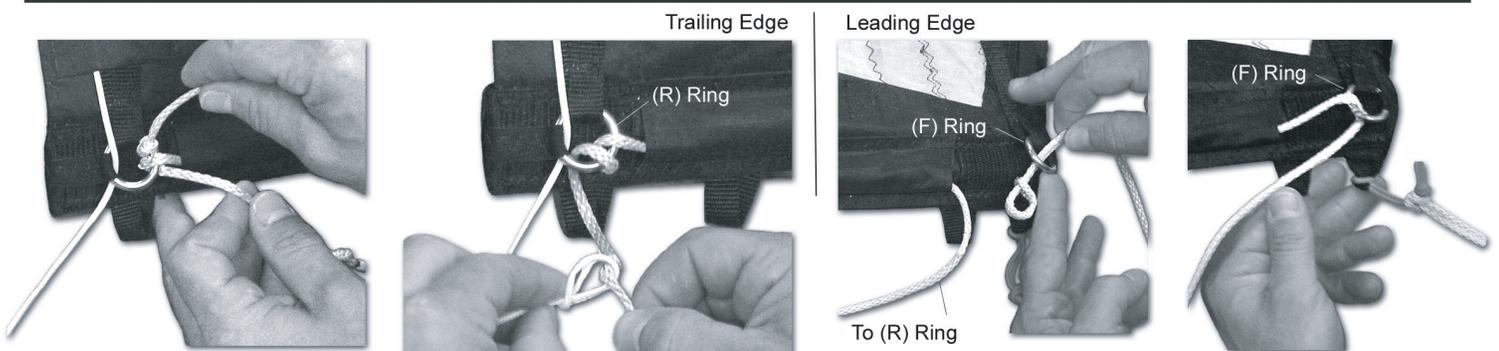


JUMPSTART INSTANT RELAUNCH

Installing the **Jump Start** system will give you the opportunity to understand the function of this product. Please refer to www.windwing.com for more information.



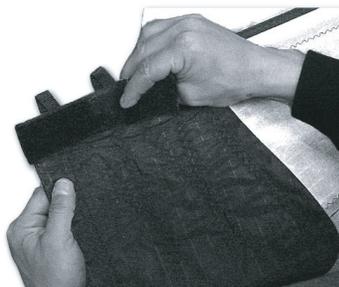
1. Insert Knot into end of Batten
2. Use Batten as a guide to pull Bridle Line through Outside Pocket
3. Pull Bridle Line and Batten through Pocket and remove Batten
4. Feed Bridle Line over and through (R) Ring



5. Wrap once or twice for more tension at Rear Ring
6. Attach Relaunch Trailing Edge Line below Control Knot on Bridle Line
7. Feed Front Knot & Bridle Larks Head through Front Ring
8. Attach Bridle Larks Head to Last Attachment Knot



9. Install Batten in Pocket provided UNDER the Bridle Pocket

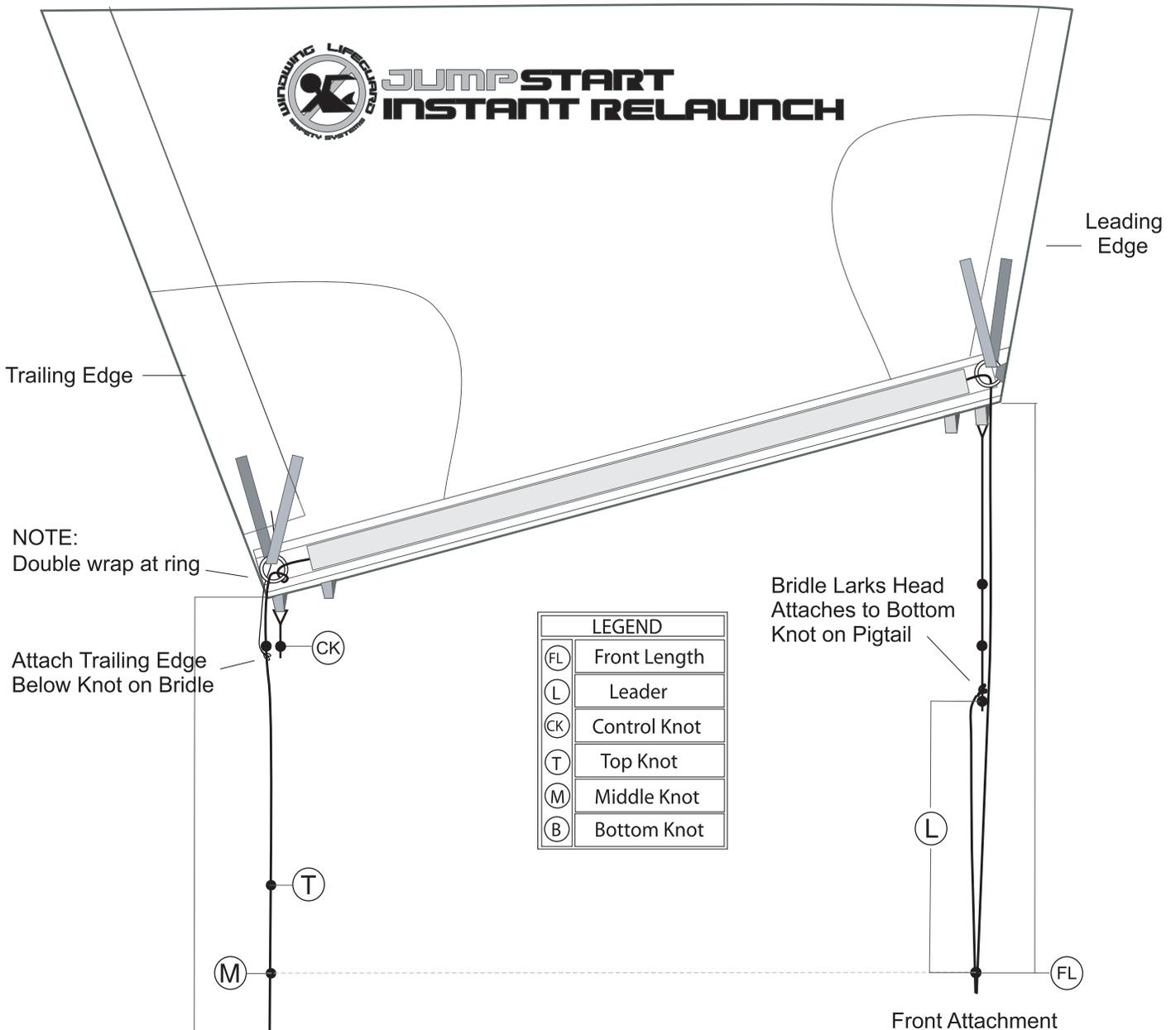


10. Secure Batten into Pocket with Velcro Closure

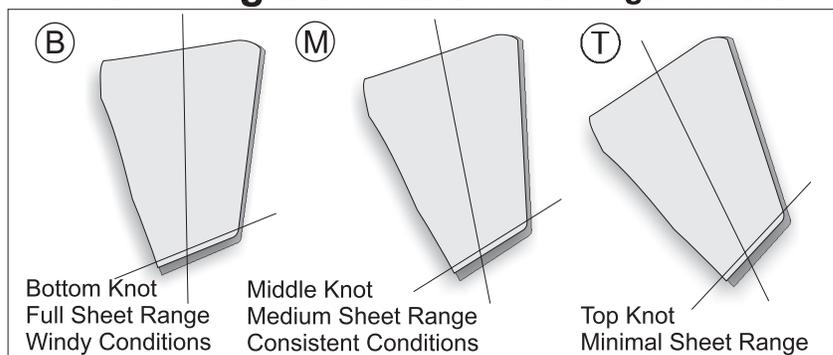


RELAUNCH BRIDLE INSTALLED

JUMP START Attachment Points for RAGE II and OUTRAGE



AOA Angle of Attack Rear Pigtail Knots



WINDWING

CRUISE CONTROL BAR

Features:

The bar is designed to reduce bar pressure and enables the rider to sheet the kite at any angle on the fly (and easily hold it static) without locking and unlocking the sheet line. This extends the range of Windwing kites by design. With the Cruise Control Bar and the SAFE System Bridle, the range and depowering of our kites are huge, with measurable safety benefits.

Design:

One side of the sheet-line (back side) has stationary points such as the PV tube and cleat. This gives the sheet-line a fixed attachment point for the pulley system to provide resistance. The resistance or tension of the sheet-line is generated from running through the sheaves and especially the upper double pulley at the top which has two sheaves. The resistance may be decreased at the double carbo-block by routing over the larger sheave only; (omit weaving through the smaller sheave).

Benefits:

Spins and aerals; The sheet lines with pulleys remain static above the bar, while below the bar all twists are relieved by simply pulling the bar towards you. The dual sheet line naturally unwinds itself. Sheeting range is increased giving the rider the ability to adjust the AOA (angle of attack) on the fly, resulting in much better upwind and reaching performance. Off the wind it's great for flying lower back in the window, and for riding waves.

In General:

The Windwing Cruise Control bar uses a patented double-pulley sheeting system for extended range and silky-smooth resistance. The bar stays in place for one-handed and no-handed flying, and reduces rider fatigue. The CC bar features a tapered composite bar with raised EVA grip, spinning leash with Delrin collar, handle pass leash attachment, optional grab handle safety release and more. This is the sweetest and smoothest bar out there.

WINDWING B-SAFE BAR

The B-Safe Basic bar is the most cost efficient and lightweight way to get going with the Windwing SAFE system. Available in 3 sizes: 45cm, 50cm, and 56cm, the bar is simple and clean in design, and features a tapered composite bar with raised EVA grip. The center set-screw allows sheet line resistance to be adjusted and allows extended sheeting range. The C-loop assembly features a Delrin collar for a spinning leash, a handle-pass ring, Clam-Cleat-style adjustable sheeting cleat with set-screw stop, and poly-vinyl line protectors.

All bars sold with lines come with 23m 4-color flying lines already installed. Replacement lines are available in 20m, 23m and 26m lengths. Windwing flying lines are made from pre-stretched Spectra cord with Dyneema sleeving and are tension rated to 600lbs (270kg) per line. Multi-color coding gives contrast for better visibility on water and snow and reduces possibility of cross-connection. Sewn loop-sleeve sections are coated in heat-shrink clear tubing for easier de-tangling, and loops also have extra stitching at the top and bottom for added strength and durability.

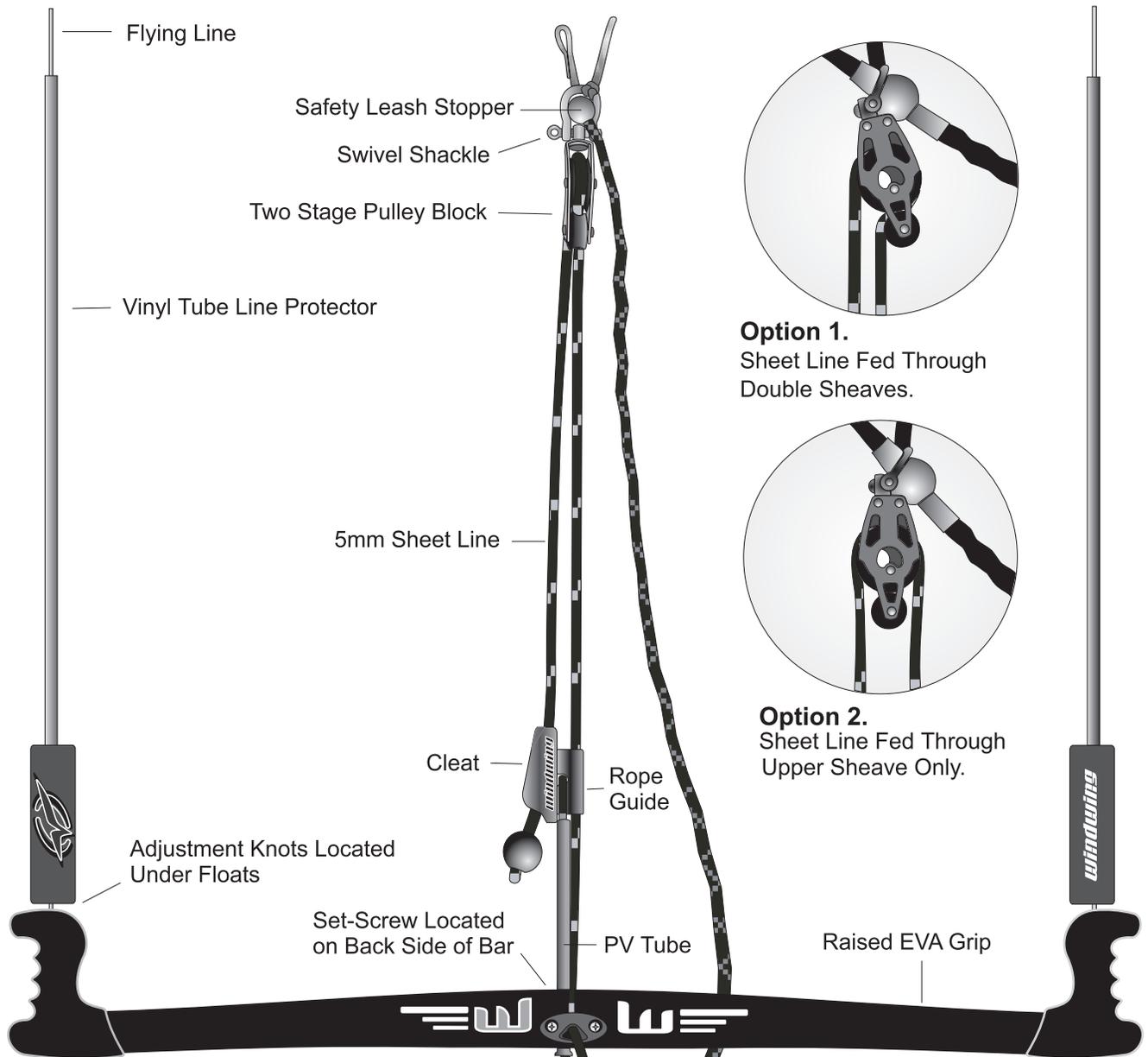
WINDWING SAFE SYSTEM

In S.A.F.E. mode, the S.A.F.E. System allows nearly 100% de-power and controlled landing in overpowered or gusty conditions, using a 4-line system that goes beyond advantages claimed by current 5-line systems.

The Windwing S.A.F.E. System is comprised of four elements - kite geometry, S.A.F.E. bridle attachments on the kite's shoulders, a front line load transfer bridle at the wingtip and an extended-range control bar.

Under normal flying, the kite is controlled in the usual manner. When the S.A.F.E. System is activated by pushing the bar away, the front line load is transferred to the kite's shoulders allowing complete de-powering of the kite. Steering and 4-line control are maintained at all times and normal flying is restored by re-sheeting the bar. Lofting and uncontrolled downwind drags are reduced and traditional re-launch is enhanced without complicated 5th line or special bar release systems.

"CC" CRUISE CONTROL BAR



Bar Tuning and Adjustments

Option 1: Provides maximum sheet line tension/resistance.
 Option 2: Provides minimum sheet line tension/resistance.

The standard sheet loop may be replaced with optional larger loop. The sheet loop installs same as standard one.

The safety leash may be substituted with the optional grab handle leash used in conjunction with either sheet loop.

Flying line can be adjustment knots are concealed under the floats. Always adjust knots evenly on both sides.

Swivel Pulley
 Releasable Safety Cuff

Spinning Ring



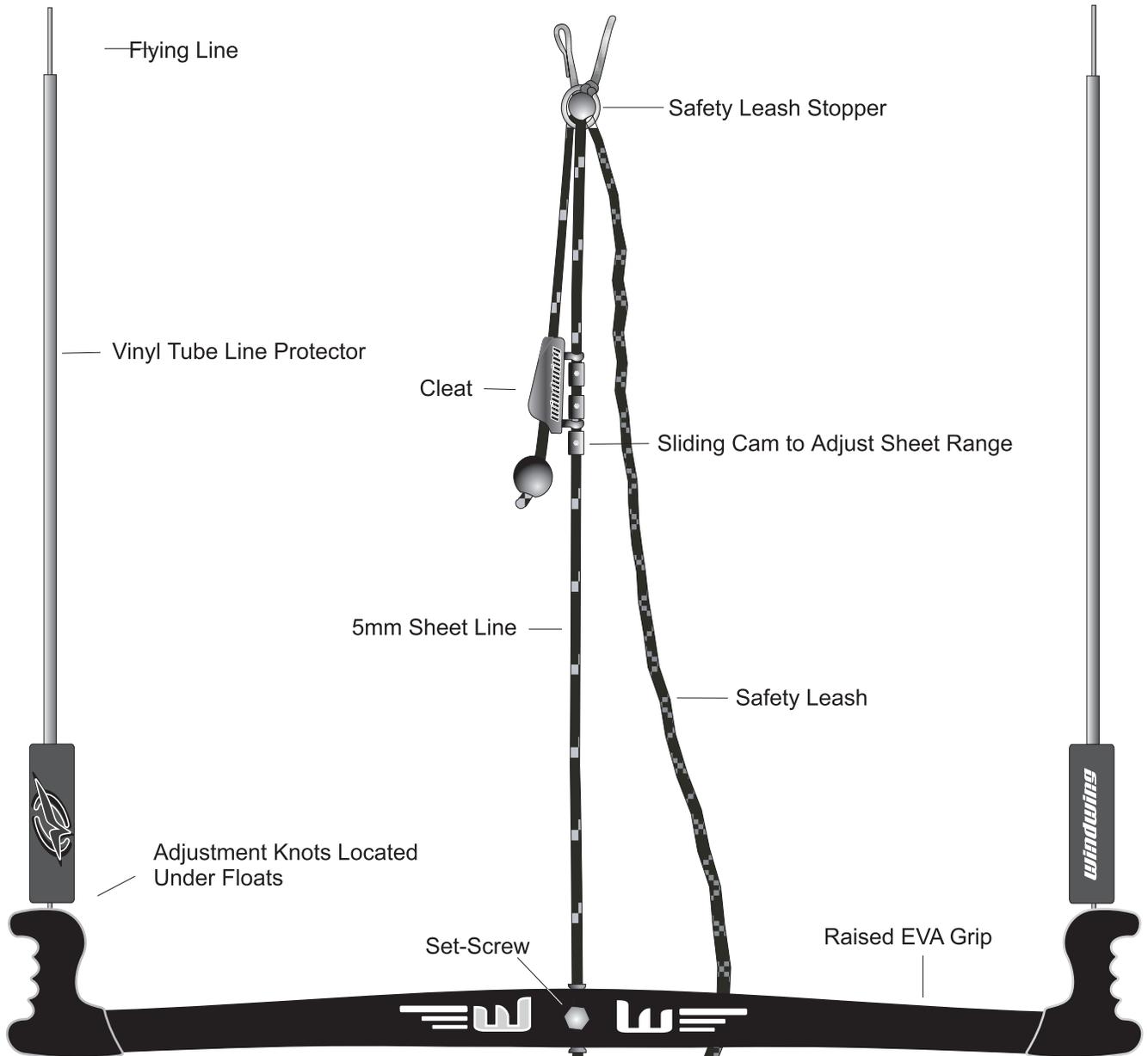
Grab Handle Leash



Large Sheet Loop

Allen Wrench

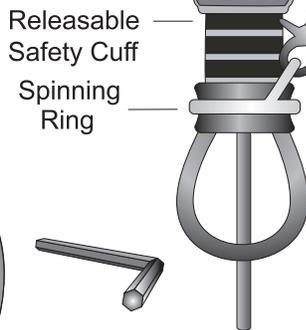
WINDWING B-SAFE CONTROL BAR



Grab Handle Leash



Large Sheet Loop



Allen Wrench

Swivel Joint Located Under the Plastic Ball

Releasable Safety Cuff

Spinning Ring

Bar Tuning and Adjustments

The set-screw will enable you to adjust the sheet line tension by screwing in the set-screw, with the provided allen wrench.

The standard sheet loop may be replaced with optional larger loop. The sheet loop installs same as the standard one.

The safety leash may be substituted with the optional grab handle leash. Used in conjunction with either sheet loops.

Flying line adjustment knots are concealed under the floats, always adjust knots evenly on both sides.

Cruise Control & B-SAFE Safety Leash and Sheet loop

The Safety Leash becomes active when the Kite Bar is released. When Safety Cuff is released the kite will be ejected.

Attaching Spinning Safety Leash and Sheet Loop



1. Make sure Safety Leash is clipped onto Spinning Ring and not on harness.



2. Bend "Chicken Bone" and Feed into Spreader Bar Hook.

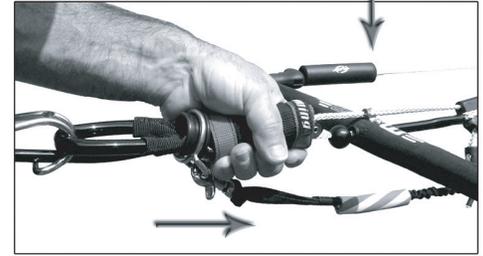


2. Grasp the Safety Cuff and push away from your body.



3. Let go of Safety Cuff for kite to de-power

Releasing Safety Cuff



1. Let go of kite bar for Emergency release of kite



4. The Leash remains attached to the Kite and the Spinning Ring on the Sheet-Loop

Releasing and Re-Setting Leash Cuff



1. To completely eject the kite, grab Leash Collar/Cuff and push away



2. To re-attach Leash Collar/Cuff, place loop over long end of Stainless Steel Pin



3. Hinge Pin in-line with Leash and slide Cuff over Pin

Re-Loading Sheet-Loop Release Cuff



1. Slide Cuff Away, Un-Fold Velcro Tab and thread lower Tab through rectangle Ring

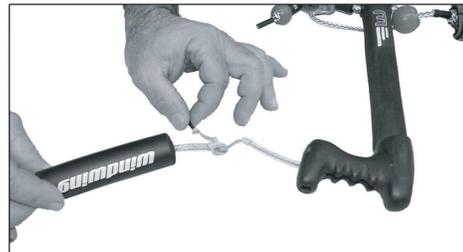


2. Fold Stiff Webbing up and squeeze velcro together pull Cuff down with logo facing you.



3. Secure Cuff down against Spinning Ring

Flying Line Adjustments

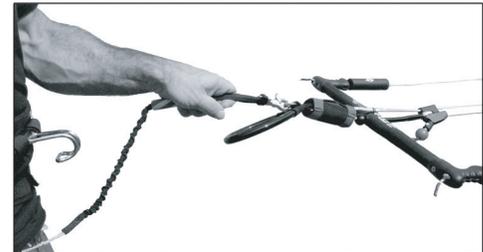


Additional Flying Line adjustments located under the Floats

Optional Handle Pass/Sheet Loop



1. Clip Handle-Pass Leash onto Stationary Ring Provided



2. Leash is now attached to the Sheet Loop

Optional sheet-loop is designed to fit in the existing cuff.

WINDWING

WARRANTY POLICY

Windwing warrants its products to be free from major manufacturer defects in workmanship or material for a period of 90 days from the date of purchase. Warranty is valid to the original purchaser only. This warranty is subject to the following limitations:

1. Warranty is only valid when warranty card (received with product or available online at windexpress.com) has been filled out and received within seven (7) days from date of purchase.
2. Warranty does not cover any product used in school, teaching, demo or rental operations.
3. Warranty does not cover any unauthorized repairs, modifications or alterations of Windwing products and will void the warranty.
4. Warranty excludes used/pre-owned gear. Warranty applies only to the original purchaser of new equipment.
5. Warranty shall terminate if product is sold or otherwise transferred.
6. Warranty does not cover damage to product caused by misuse, neglect, abuse or normal wear and tear. Examples of this would include, but are not limited to punctures, sun exposure damage, over inflation of bladders, improper handling and storage, use in waves or shore break, high speed crash or anything other than defects in the material and craftsmanship.
7. Windwing has sole discretion to void warranty if the company feels that the purchaser is taking advantage of this policy or dealing in bad faith.

Windwing may require detailed photos of damage to be sent prior to product shipment for warranty determination. In addition, Windwing will require serial number(s) of product(s), original invoice, original receipt and retail name of purchase location. Windwing reserves the right to repair or replace the product at our discretion. Product may be repaired to purchase date performance (not purchase date appearance). If Windwing elects to replace product, we may, at our option, replace product with used or demo product in similar condition.

WINDWING

WARRANTY CARD 90 DAYS LIMITED WARRANTY

Name:.....email:.....
Address:.....
City:State: Zip:
Country: Date of Purchase
Name of Shop:.....
Receipt #
Product Description:
Serial Number: