

OWNER'S MANUAL

BUSTER

DEUTSCH
ENGLISH
FRANÇAIS
ESPAÑOL



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1. PARTS LIST

- Kite
- Expandable Bag
- Pump
- Repair Kit



Warning: Kiteboarding is dangerous

- Always use extreme caution when using this product
- Only use this product if you are in good physical health.
- Never act in a careleccanner when using this product.
- You are responsible for your own safety and the safety of others when using this product.

2. RELEASE OF LIABILITY

By assembling and/or using this North Kite Product, you agree that you have read and understood the entire North Kiteboarding Product Owner's Manual, including all instructions and warnings contained in that Manual, prior to using the North Kiteboarding Product in any way. You additionally agree that you will ensure any additional or subsequent user of your North Kiteboarding Product will read and understand the entire North Kiteboarding Product Owner's Manual, including all instructions and warnings contained in that Manual, prior to allowing that person to use your North Kiteboarding Product.

ASSUMPTION OF RISK: Use of the North Kiteboarding Product and any of its components involve certain inherent risks, dangers, and hazards which can result in serious personal injury and death to both the user and to nonuser third parties. In using the North Kiteboarding Product, you freely agree to assume and accept any and all known and unknown risks of injury to you and to third parties while using this equipment. The risks inherent in this sport can be greatly reduced by abiding by the warning guidelines listed in this owner manual and by using common sense.

RELEASE AND WAIVER OF CLAIMS: In consideration of the sale of the North Kiteboarding product to you, you hereby

agree to the fullest extent permitted by law, as follows:

TO WAIVE ANY AND ALL CLAIMS that you have or may in the future have against Boards & More and all related parties resulting from use of the North Kiteboarding Product and any of its components.

TO RELEASE Boards & More and all related parties from any and all liability for any loss, damage, injury or expense that you or any users of your North Kiteboarding Product may suffer, or that your next of kin may suffer, as a result of the use of the North Kiteboarding Product, due to any cause whatsoever, including negligence or breach of contract on the part of Boards & More and all related parties in the design or manufacture of the North Kiteboarding Product and any of its components.

In the event of your death or incapacity, all provisions contained herein shall be effective and binding upon your heirs, next of kin, executors, administrators, assigns, and representatives. Boards & More-related parties have not made and expressly deny any oral or written representations other than what is set forth herein and the North Kite Product User's Manual.

3. SAFETY

General Safety

Kiteboarding is a dangerous sport. The larger the kite and the stronger the wind, the more dangerous a sport it is.

Therefore, you should go kiteboarding only if you are in good physical condition and only with extreme caution. Ensure that you are familiar with safety precautions and skills required for safe kiteboarding.

Use this product only after receiving instruction from a school or certified instructor.

Primary Dangers of Kiteboarding

The kite or its lines may do the following under certain circumstances.

- pull you into the air and drop you on the ground
- hit unexpected obstacles or get drawn into other dangerous situations
- hit power lines and electrocute you
- be hit by lightning and electrocute you
- entangle a bystander and expose him or her to all of the risks listed above
- strike a bystander.
- seriously cut or burn you or a bystander.

There is also the risk that the kiteboard may:

- hit you in the head

- cause you to seriously injure your feet, ankles and/or legs
- never use this kite as a mean for flying
- once the kite has been inflated and is not in use, it is important to secure it with sand or some other heavy item. An inflated kite can always take off, even without a person to steer it. If this happens, it could seriously injure other people or even kill.

These lists are not comprehensive. Therefore, the basic rules of kiteboarding are:

1. Don't risk the safety of people around you.
2. Keep the risks to your own safety within reasonable limits.

The Safety of Others

- Since you are responsible for ensuring that your equipment and actions don't endanger other people, you should not fly or ride where your kite and lines have a chance of hurting other people.
- Only fly the kite over unobstructed water.
- Do not fly your kite over people or pets.
- Ensure that a semi-circle extending 100 meters downwind and to each side

from your flying position is clear of people and obstructions.

- Use a kite leash that permits you to keep the kite under control under all foreseeable circumstances.
- Avoid flying the kite near other water users such as kayakers, swimmers, surfers, windsurfers, waterskiers, motorboats, or sailboats.

Rider Safety

- Fly this kite only while in unobstructed water. Never on land.
- Fly this kite only if you are a strong swimmer and wear a Coast Guard-approved PFD.
- Go no farther from land than you're able to swim.
- Use a kite leash that you can disengage from your body in case of an unforeseeable emergency.
- Avoid power lines, telephone poles, airports, roads, buildings, and trees.
- If you use a board that is leashed to your body, wear a helmet.
- Take into account the usual risks associated with watersports into account: sunburn, hypothermia, jellyfish, etc.

Warnings About Kite Lines

- Stay clear of kite lines when the kite is under wind load as these lines can become dangerously sharp when under tension.

4. INFLATING THE KITE

- Use only kite lines that are in good condition – no cuts, nicks or abrasions.
- Use only lines that have no knots in them, as knots can weaken lines by as much as 50%.
- Stay clear of kite lines unless the kite has been secured to the ground. An unsecured kite can re-launch unexpectedly, putting the lines dangerously under tension.

Warnings about Weather Conditions

- Try to avoid off shore wind and be careful with on shore wind.
- Always be informed about various currents and tides.
- Never use this kite in winds so strong that you are unable to maintain precise control.
- Never use this kite when wind conditions are likely to change dramatically.
- Never use this kite when electric storms are nearby or when such storms have a good chance of developing.

Self Rescue

You should learn reliable self-rescue techniques at an accredited kiteboarding school. In case you have to rescue yourself due to side shore or onshore conditions, you can always use the self rescue drag handles which are placed on the inside of the wingtips. These straps will help you hold the kite during a body drag towards the beach.



General Guidelines

1. Lay the kite out on grass or sand or other surface free of hard or sharp objects such as rocks, sticks and thorns. While kites are engineered to withstand the stresses of flying, they can easily be damaged by rocks, sticks and other hard objects.
2. Angle the kite so that one end is upwind, the other downwind.
3. Place a weight – sand, gear bag, etc. – on the upwind end of the kite.

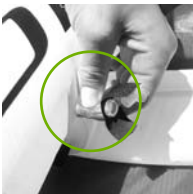
4. Inflate the ribs starting with the upwind tip rib.

5. Inflation involves these steps:

- Grasp the base of the valve with one hand and insert the pump tip well into the valve with the other hand;
- Pump air into the bladder until it is firm;
- If the valve is a one-way valve (found on some North ribs and easily identified by the fact that it doesn't let air out easily), simply close the valve with the plug and secure the velcro (if present); If the valve is a two-way valve,
- Pinch the base of the valve with your fingers to prevent air from escaping, then remove the pump's tip from the valve; Take off the top of the pump of the valve;
- Quickly close the cap on the air valve. Fasten the velcro retainer over the top. Do not push the valves into the bladders after inflating.
- Inflate the leading edge bladder last. Inflate it to the point where it starts to assume its curved shape. At this point, remove the weight from the end of the kite and continue pumping the leading edge bladder under it's firm and there are no wrinkles in it.

Inflation pressure

- North kites work well with inflation pressure in the ribs of between 10 and 15 psi. Small ribs, such as those on kites of eight square meters and smaller, can be inflated to 15 psi. Larger ribs, those on kites of 10 square meters and more, should be inflated to no more than 10 psi.
 - North kites work well with inflation pressure in the leading edge of between 5 and 8 psi. Smaller kites, eight square meters and smaller, work well at the higher end of this range. Bigger kites, ten square meters and bigger work best at the lower end of this range.
 - Failure to observe these inflation limits can result in over-inflation and possible seam failure.
 - The small hand pump that is commonly used to inflate smaller kites will give a maximum pressure of about 10 psi.
 - The large hand pump that comes with the larger kites will give a maximum pressure of about 15 psi.
- While removing the pump from the valve after inflation, be sure to pinch the valve lower than the valve opening to minimize loss of air while plugging the valve.



Trouble-shooting

Sometimes a valve will be pulled into a tube during the inflation process because of the bladder in the tube being twisted. This happens most often on the leading edge tube and is a result of improper inflation practices. For example, if the leading edge tube is not laid out straight on the ground before inflation, the bladder is likely to twist inside the tube.

Should this happen, you may be able to correct the problem by deflating the bladder, reaching an arm into the bladder access zipper, and untwisting the bladder. Coating the bladder with talcum powder can improve chances of success.

If this approach is unsuccessful, the other option is to remove the bladder entirely, coat it with talcum powder, and reinstall it.

Turning and securing the kite on the beach

When you are not using the kite it has to be stored safely on the beach. For this, you have to turn over the kite as it is shown in the picture. By doing this, the leading edge should always face towards the wind in order to be secured by enough weight. A safe bet is to rather have a little more sand than too little. Should the kite fly away, it can quickly become a dangerous flying object for yourself and your environment. Also,

when turning it around, make sure that there are no sharp objects lying on the ground.



5. RIGGING OF THE KITE

Attaching the lines

The most common mistake in kiteboarding is to mix up the front lines and the back lines. For this reason, 2003 North kites are equipped with our KookProof line attachment system. There is a knot for attaching the lines on the front side of the tip, while the backside has a loop. The lines are equipped with the matching pieces. Thus, it is now virtually impossible to mix up the lines. Nevertheless, it is important to make sure that the lines have been properly attached to the kite. In case that you have not used a North Kiteboarding line, you have to mount (turn around) the rear attachment points so that the knot is placed at the end.



Use the loop/strap to make a "lark's head" knot at the end of the line, or respectively at the end of the kite. Pull the lark's head knot over the knotted end at the corner of the kite or the lines. Pull it tight at the end.

Rough-tune Power

The Buster works well when the length of front- and back lines are even.

However, this does not mean that kite lines tuned in this rough way will ideally prepared for every kite boarder or wind speed. Each kite boarder, kite and kite boarding situation differ from one another. This also means that the kite boarder needs to adjust the length of his lines before and during his flight by means of North Flight Control or similar systems.

Turning Speed

The North Kiteboarding Turning Speed Controller gives you two opportunities to regulate the speed of your kite. (In combination with the North Kiteboarding Bar „Scepter“ you even get four. See the „Scepter“ manual!) When tying your lines to the rear attachment point the kite will turn faster. By attaching the lines at the front, the kite becomes slower.

Before starting to kite, make sure that all four lines are securely fastened.

6. WINDSTRENGTH AND KITESIZE

All Rhino kites are high-powered jumping machines designed for the expert kiteboarder who knows all the tricks of safe kiteboarding and who has considerable skill at water relaunch.

All Toro kites are superbly easy to water relaunch and offer easy, predictable performance.

Only about 8 knots of wind speed is required to fly any of these kites. However, kiteboarding generally requires more wind, depending not only on rider ability but also on the size of kite, rider and board.

The following table demonstrates the APPROXIMATE average wind speeds in which kites of different sizes can be used by 175-lb. (80-kilo) kiteboarders of various skill levels. Riders who are significantly heavier or lighter (25 pounds, or 11 kilos) should use, for a given wind speed range, kites that are one size bigger or smaller respectively.

No kiteboarder should take these numbers as a recommendation. They represent a rough guide only. Keep in mind that kiteboarding is a dangerous sport in any circumstance and that using any kite in any wind strength can result in serious injury or death.

- A novice has flown small trainer kites but has no experience with large kiteboarding kites.
- An intermediate rider can stay upwind while kiteboarding
- An advanced rider can jump consistently and safely, without injury.
- An expert rider can perform aerial spins and flips while maintaining a safe level of kite control.
- These wind strength numbers do not represent gusts and lulls, but only average wind speeds at a height of 2 meters from the surface of the water in typical sea level atmospheric conditions.

Kite Size Information

There are several ways of measuring a kite and even more ways of indicating kite size. This can be confusing. To be clear, North kites are named according to their actual surface area. For example, if you have a sheet of paper that measures ten cm wide by ten cm long, the area of this sheet of paper is 100 square cm. Each panel of fabric in the canopy of a North kite is precisely measured in this way, and the sum of the areas of all these panels is listed as the size of the kite. Note: Surface area (or size) doesn't necessarily indicate power.

KITE SIZE / RIDER ABILITY / WIND SPEED		
KITE SIZE	Novice/Intermed.	Intermed./Advanced. (80kg Kiter)
3m ²	15knots	n.a.
5m ²	18knots	24knots
8m ²	15knots	21knots
11m ²	13knots	18knots
14m ²	10knots	15knots

BUSTER SPECIFICATIONS			
KITE SIZE	PROJECTED AREA	ASPECT RATIO	WIPIKA STYLE
3m ²	1,7	3,5	2,2
5m ²	2,8	4,0	3,7
8m ²	4,5	4,5	5,9
11m ²	6,2	4,7	8,1
14m ²	7,8	4,9	10,3

7. KITECARE

General Tips

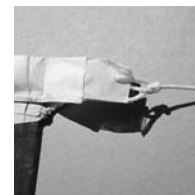
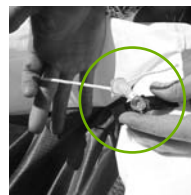
- Keep your kite clear of sharp sticks, rocks, thorns and other objects that can puncture or tear the cloth.
- It's possible to damage the canopy in a way that's not at all obvious until the kite fails for no apparent reason while flying. Failures of this sort are usually caused by careless handling on the ground, such as, for example, placing a rock on the canopy to secure the kite in place.
- Sun is one of your kite's worst enemies. Therefore, you should keep your kite out of the sun as much as possible.
- Deflate the bladders if the kite is to be left unattended for any length of time.
- To secure the kite while it's inflated, lay the kite on the ground with its ribs downward and the leading edge upwind. Put sand or a gear bag or some other weight on the canopy, just behind the leading edge. Be sure the weight has no sharp edges and that the ground on which the kite is lying has no sharp edges or hard surfaces.
- To carry a kite, turn it so that the leading edge is upwind and the underside faces upward. Cup your hand around the center of the leading edge tube. If the wind is blowing, it will hold the kite clear of the ground. Be sure not to drag the tips of the kite across the ground.
- A salt coating that results from using

the kite in salt water will not damage the kite. However, rinsing in fresh water and drying can't hurt.

- It's best to let the kite dry while out of the sun and wind.
- Failure to dry the kite after use or rinsing in fresh water can cause mildew, which is unsightly but will not affect the performance of the kite.
- Be sure to prevent water, dirt and sand from entering the bladders when using or rinsing the kite.
- Failure to dry the kite after use or rinsing can cause bleeding of ink from one panel of cloth to another. Such bleeding is not covered under warranty.
- Keep sand and water out of the air pump.

Repairing Kite Bladders

1. Lay the kite out flat with the ribs facing up. Flying lines should be removed and all the ribs deflated.
2. Tie a "reinstall" line to the bladder. You'll use this line to pull the bladder back into the tube after the repair has been completed. If you're repairing a strut bladder, the line should be tied to the valve (1) and should be about one meter (40 inches) longer than the rib. If you're repairing a leading edge bladder, a line should be tied to each end of the bladder (2). Each line should extend one meter more than the distance from kite tip to center.



3. Push the air valve entirely into the rib.

4. If you're repairing the leading edge bladder, open the velcro flap near the middle of the leading edge and pull the bladder out, first one side, then the other.



If you're repairing a strut rib, pull the bladder out of the rib from the back. and extend from each end.



5. It's best if someone helps you by holding one end of the leading edge or rib and ensuring that the bladder feeds out of the tube smoothly.

6. When the bladder has been removed from the kite, the reinstall line should pass through the tube

7. Inflate the bladder and wipe soapy water on it with a sponge. Alternatively, submerge portions of it in a tub of water. Holes are indicated by air bubbles. Small leaks can be hard to find, so be sure to put the tube under pressure with your hands.

Repairing Kite Bladders.

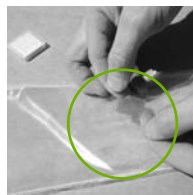
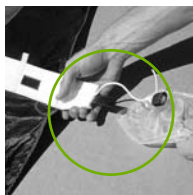
8. Dry and clean the bladder with a towel, and mark the hole using a permanent black marker. Again, deflate the bladder.

9. Using the sandpaper enclosed in the repair kit, lightly rough the area to be repaired.

10. Now you cut out a round patch from the tube material that came with it.

11. Use a very thin layer of Patex on the patch and on the area around the hole. Use the manual for directions that is printed on the Patex tube and wait for both sides to get a bit dry. The first pressure you put on the patch is the most important for a successful repair.

12. Peel the backing off the repair patch and press it on the bladder to cover the hole (8).



13. Close the valve and put the dry bladder in a plastic bag with a sufficient amount of talcum powder.

14. Close the bag and shake it until the talcum powder completely covers the bladder.

15. Before you begin the reinsertion process, fold the bladder like an accordion, with the air valve lined up to the valve opening.

16. Have your helper pull the feed line so the bladder is re-inserted into the rib. While he/she is doing this, you should keep tension on the rib and make sure the bladder is inserted properly.

17. Once the bladder is completely inserted into the rib, make sure the air valve is properly exposed through the valve opening.

18. Inflate the bladder until it is half full with air. Check to make sure that the bladder was inserted correctly and that there are no folds in the bladder material. If you detect a crimp in the bladder or the air valve appears misaligned, stop and re-insert the bladder. Failure to correct the problem at this point can cause severe damage to the bladder

when it is fully inflated.

19. Roll the excess bladder material into the tip of the rib and reconnect the Velcro strap under the securing loop.

8. DOUBLE-UP CONVERSION KIT

Double-Up Description

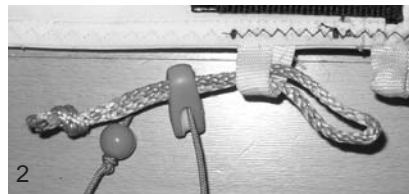
North's patent pending Double-Up Conversion Bridle allows a rider to use a North Buster as a two-line kite. This feature is useful for both novice riders who want to benefit from the simplicity of two lines and experts who want to ride wake-style.

The advantages of the Double-Up over other two-line converters are:

1. The kite is burdened with no extra, unneeded parts when being used in either two-line or four-line mode.
2. The bridle is less likely to tangle compared to bridles that are more conventional, so the kite is more likely to relaunch from the water.

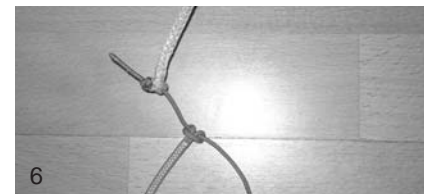
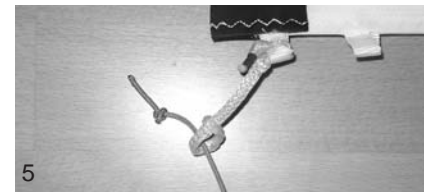
Double-Up Set-up

1. Inflate the kite and secure it to the ground.
2. Remove the front pigtails.
3. Lay the bridles out near the kite like shown in the photo (illu.1).
4. If your kite is equipped with several front attachment options, always use the rear one. Thread the pigtail through the attachment as described in (illu.2). It is very important to stick to the description shown in the illustration.
5. Make a lark's head as described in (illu.3) and loop it over the pigtail's knot as described in the illustration 3b.



6. Tighten the lark's head and verify once again whether the stopper-ball is located on the cross bridle on the rear side of the pulley (the side pointing towards the rear side of the kite) (illu.4)
7. Attach the rear lines to the original rear pigtails (illu.5).
8. In order to attach a cross bridle, remove the rear opposite bridle loop from its pigtail and slide the cross bridle loop around that line (illu.6). Then

connect the rear line with the pigtail again.



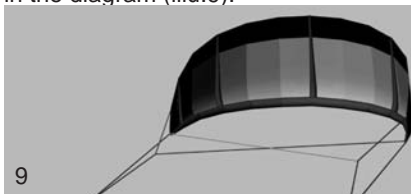


9. Slide the cross bridle loop down the rear bridle to the knot in the middle of the rear bridle. Tighten the loop onto the rear bridle at a point just below (the side pointing away from the kite) the knot (illu.7).

10. Repeat step 7 and 8 on the other side of the kite.

11. Attach kite lines to the free bridle ends (illu.8).

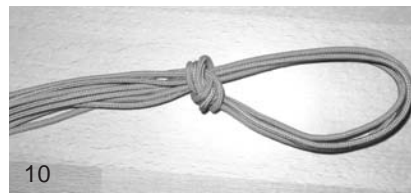
12. Pull the bridle lines straight as shown and ensure that they look like the bridle in the diagram (illu.9).



Taking down and storing your Double-Up

1. Remove kite lines from the ends of the Double-Up bridle and bring the two bridle ends together. Tie the two ends together in an overhand slip knot (illu.10).

2. Place the overhand slip knot loop around the valve of the center rib and pull tight (illu.11). Deflate and roll up your kite in the normal way. Take care to roll the bridle lines into the kite.



Notes

1. The Double-Up Conversion Bridle has been carefully designed and tested. We recommend that you not modify it trying adjust kite power or turning speed. To adjust power, use a different kite. To adjust turning speed, change bar or line length as described in the Buster

Owner's Manual.

2. If you wish to make a quick conversion from two-line to four-line mode, just detach your kite lines and reinstall the front pigtails at the attachment point.

3. You should keep the plastic line winders for future tangle-free long-term storage of your Double-Up Conversion Bridle.



9. WARRANTY POLICY

North Kiteboarding warrants this product to be free of major defects in material or workmanship to the original purchaser, for a period of six (6) months from the date of purchase. This warranty is subject to the following limitations:

The warranty is valid only when the warranty card is properly filled out and returned to North Kiteboarding within seven (7) days from the date of purchase.

The warranty is valid only when the product is used for KITEBOARDING ON WATER, and does not cover products used in rental or teaching operations.

North Kiteboarding will make the final warranty determination, which may require inspection and/or photos of the equipment, which clearly show the defect(s). If necessary, this information must be sent to the North Kiteboarding distributor in your country, postage prepaid. Product can be returned only if a return authorization number (RA) is given by the North Kiteboarding distributor in advance. The RA number must be clearly labeled on the outside of the package, or will be refused.

If a product is deemed to be defective by North Kiteboarding, the warranty covers the repair or replacement of the defective product only. North

Kiteboarding will not be responsible for any costs, losses, or damages incurred as a result of loss of use of this product. This warranty does not cover damage caused by misuse, abuse, neglect or normal wear and tear including, but not limited to, punctures, rigging with other than North Kiteboarding components, damage due to excessive sun exposure, or damage due to over inflation of the bladders, damage caused by improper handling and storage, damage caused by use in waves or shore break, and damage caused by anything other than defects in material and workmanship.

This warranty is voided if any unauthorized repair, change or modification has been made to any part of the equipment.

The warranty for any repaired or replaced equipment is good from the date of original purchase only.

The original purchase receipt must accompany all warranty claims. The name of the retailer and date of purchase must be clear and legible.

There are no warranties, which extend beyond the warranty specified herein.

Warranty Claims

Warranty claims must be processed and be issued a return authorization prior to shipping to North. Please call or write

for claims processing to the national North Kiteboarding distributor or:

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