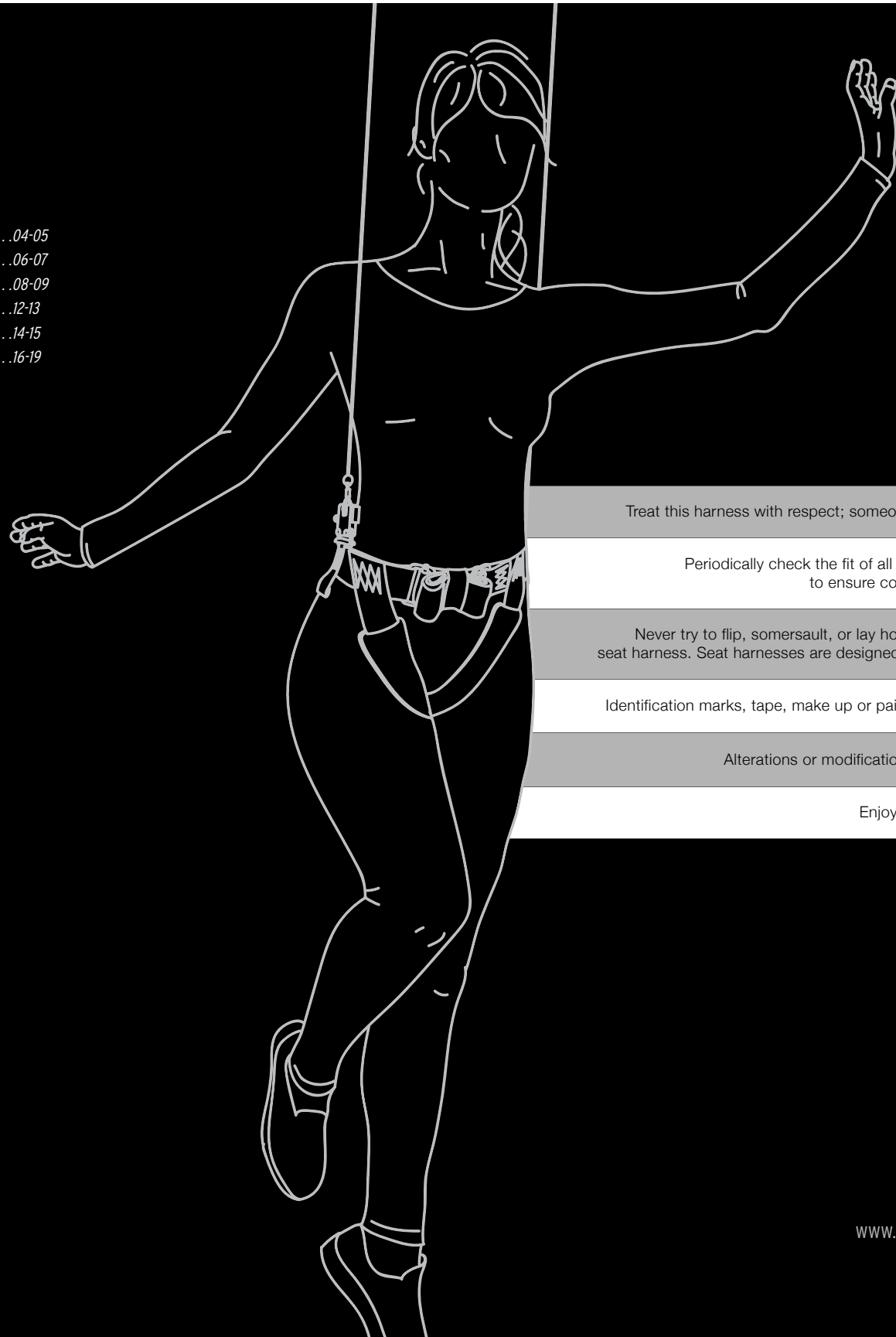


A woman with dark hair pulled back, wearing a black short-sleeved zip-up top with a logo on the chest and black pants. She is wearing a tan seat harness. The background is white.

# USER / OPERATOR GUIDE & WARRANTY INFORMATION

Seat Harness **SE-01**

- General Information .....04-05
- Parts & Details .....06-07
- Sizing .....08-09
- Fitting .....12-13
- Troubleshooting .....14-15
- Maintenance .....16-19



*ZFX flying harnesses meet the needs of flying performers with lightweight and innovative products. They are designed, tested and manufactured using a strict quality control system, ensuring reliable and safe products. These instructions cover the correct use of the harness throughout the life of the product. If lost, you can download the instructions from the website at [www.zfxflying.com/harnesses](http://www.zfxflying.com/harnesses).*

Treat this harness with respect; someone's life depends on it.	YES
Periodically check the fit of all performers' harnesses to ensure correct and consistent fit	YES
Never try to flip, somersault, or lay horizontally while using a seat harness. Seat harnesses are designed for upright flying only.	NO
Identification marks, tape, make up or paint on any ZFX harness	NO
Alterations or modifications to any ZFX harness	NO
Enjoy your flying experience	YES

## GENERAL INFORMATION: PERFORMER FLYING HARNESS

**USE:** This Harness is for professional theatrical performer flying use and shall only be used for that applications. This harness shall not be used for activities typically requiring a jerk harness or jerk vest. Improper use, incorrect selection, misuse or poor maintenance can lead to serious injury or death. User is responsible for adhering to the manufacturer's safety and inspection instructions. It is the responsibility of the user to obtain qualified instruction in the proper use of harnesses prior to usage. This equipment should be used only by trained and competent persons. This harness must be considered as part of the "machinery intended to move performers during artistic performances," hereinafter referred to in this document as "machinery." Therefore, all safety precautions and inspection instructions concerning or regarding the "machinery" must be obeyed. This is not a fall protection harness. Therefore, the flying system, suspension device and choreography should be designed and utilized in such a way as to minimize potential falls or falling distance. The user must be healthy enough to engage in the activities they will attempt.

The user agrees to comply with all relevant published industry standards. The user understands that it is beyond the scope of this manual to train the user in the safe use of this harness given all possible performer flying scenarios. The user also understands that following these instructions alone does not qualify someone to perform, rig or choreograph theatrical flying effects.

The product should only be used as instructed and no alterations may be made to its original design. It may be used in conjunction with appropriate hardware of suitable specification and according to the applicable EN (European) and/or ANSI (American) standards, with due consideration to the limitations of each individual piece of equipment.

These instructions demonstrate some examples of improper utilizations of this product. Note that it is not possible to show or imagine all improper utilizations of this product, and it should only be used in the way specified by the manufacturer in these instructions.

The harness shall only be used in situations that have a rescue plan and/or rescue facilities in case the "machinery" stops working and the performer is stranded and/or suspended in the air. The rescue plan and/or facilities must ensure that the person in harness can be rescued within 15 minutes. The rescue needs to be rehearsed regularly by all users.

The purchaser agrees to check the manufacturer's website on a monthly basis for instruction revisions, updates and/or recall notices and to immediately inform the manufacturer of any defects or issues with the harness: [www.zxflying.com/harnesses](http://www.zxflying.com/harnesses) or [harnesses@zxflying.com](mailto:harnesses@zxflying.com).

### MAINTENANCE:

- Cleaning of textile and plastic parts: Rinse in clean water and neutral soap (max temperature 50°C/122°F) and air dry away from direct heat.
- Cleaning of the metallic parts: Rinse in clean water and then dry well, checking that no moisture remains.
- Temperature: Always keep this product below 50°C/122°F so as not to affect the performance of the product.
- Chemicals: Withdraw the product from service if it comes into contact with chemical reagents, solvents or fuels, all of which could affect the performance of the product.

**STORAGE:** Store unpacked in a cool, ventilated, dry place away from UV light, heat sources, high humidity, sharp objects, corrosives or other possible causes of damage.

**RESPONSIBILITY:** ZFX Inc., or the distributor, will not accept any responsibility for damage, injury or death resulting from misuse of or from modifications to the original product. It is the User's responsibility at all times to ensure that he/she understands the correct and safe use of any equipment supplied by or from ZFX or the distributor, that he/she uses it only for the purposes for which it is designed and that he/she practices all proper safety procedures. Before using the equipment, the user agrees to take all necessary steps to become familiar with rescue techniques should an emergency occur. The user agrees to comply with all relevant published industry standards.

The user personally assumes all the risks and responsibilities for his/her actions and decisions; if he/she is unable or not in a position to assume these risks and responsibilities, he/she should not use this equipment.

**2 YEAR LIMITED WARRANTY:** This product is guaranteed for 2 years against any faults in materials or manufacture. The limitations of guarantee are the following: modifications or alterations, incorrect storage, corrosion, damage due to accidents and negligence, overloading or other uses for which this product is not designed.

**SPECIFIC INFORMATION:** For a correct fit, choose harness size according to the sizing table on pages 8/9. When fitting the harness, the user must carry out a suspension test in a safe place at ground level to ensure that the harness is fitted properly. All the different positions expected in the intended use should be tested. Check all mechanical aspects of the harness to ensure that the harness is secure. Check all adjustable components before the use of the product to ensure that all parts of the harness are secure.

**INSPECTIONS:** Each harness must be inspected after each use. When in use, the harness shall be inspected weekly. Inspections shall be documented. Completed inspection forms should be kept in a Maintenance Log. A sample inspection form is included on pages 16/17 and downloadable forms are available at [www.zxflying.com/harnesses](http://www.zxflying.com/harnesses).

- Check the legibility of the identification markings on the harness
- Check all webbing for fraying, cuts, tears or punctures
- Check for snags or loose threads on all stitching
- Check for cuts, burns or stretched joints on all stitching
- Examine the Quick Clips - verify that they open and close smoothly and the attachment webbing is secure
- Examine the buckles for proper attachment, ease of connection/disconnection and complete closure

**RE-CERTIFICATION:** In addition to the user implemented inspections, this product shall be examined annually by a qualified person approved by ZFX or the distributor. Any repairs shall be done by a qualified person certified in the care of ZFX harnesses, and all adjustments shall be noted on the life sheet of the harness, along with the ZFX approved re-certification when completed. The life sheet shall be kept in the Maintenance Log. Please contact the ZFX office with any questions about conditions or repairs needed.

**LIFETIME:** The product lifetime is 10 years from the date of purchase unless any defect appears. Annual re-certifications must be recorded in the life sheet of the product by competent persons certified by the manufacturer (ZFX) or distributor. The following factors can reduce the lifetime of the product: intense use, damage to components of the product, contact with chemical substances, high temperatures, tears and abrasions, violent impacts, and/or failure to maintain as recommended. (Productions with an eight to ten performances per week production schedule should expect about a three year lifespan.) If it is suspected that the product is no longer safe and reliable, withdraw the harness from service immediately and contact ZFX or the distributor.

### CONFORMITY WITH THE MACHINERY DIRECTIVE:

This product is designed in compliance with Directive 2006/42/EC on machinery, although flying performer harnesses which are part of "machinery intended to move performers during artistic performances" are excluded from the scope of this Directive.

### HARNESS IS ALSO COMPLIANT WITH THESE STANDARDS:

Safety Guidelines for the Live Performance Industry in Ontario, Canada

NPR 8020-11, Netherlands

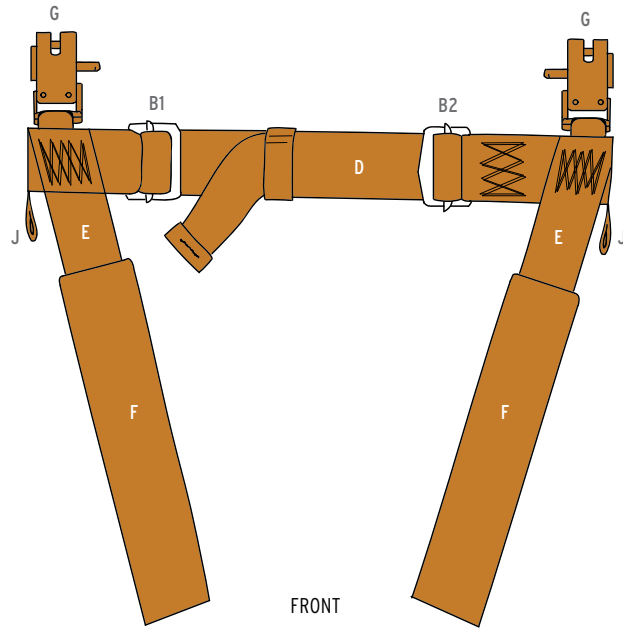
GUV-I 8636, Germany

Variance from NY State Industrial Code Rule 41

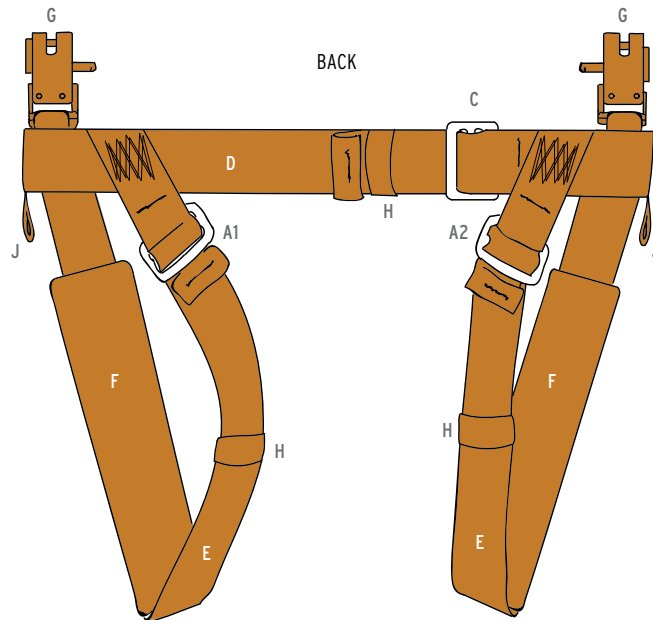
ABTT, Code of Practice for the Theatre Industry Part 2 Chapter 1 - Flying, United Kingdom

**TECH SUPPORT:** If at any time technical support is required, email [harnesses@zxflying.com](mailto:harnesses@zxflying.com) or visit our website at [www.zxflying.com/harnesses](http://www.zxflying.com/harnesses).

# PARTS & DETAILS: SEAT HARNESS

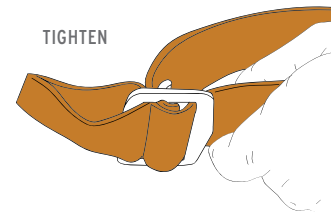
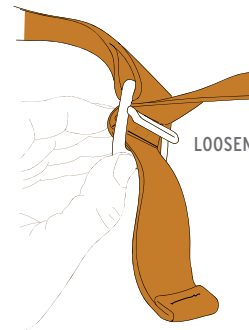


G	Slide Buckles - Leg
B1	Slide Buckles - Belt
B2	Three-Bar Adjuster
D	Belt Strap
E	Leg Strap
F	Padding
J	Quick Clips
H	Keeper Loops
A1	Stirrup Loops



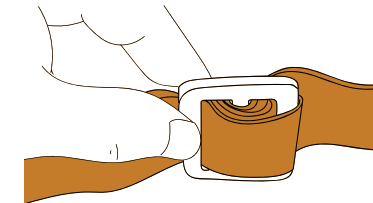
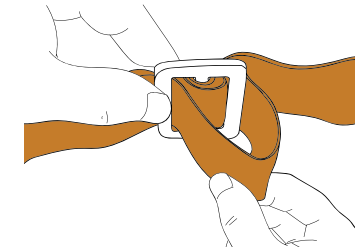
## SLIDE BUCKLE

Slide buckles are used to easily tighten and loosen belt and leg straps. To tighten, pull the excess strap away from the buckle. To loosen, lift up gently on the buckle and pull. The strap will feed through.



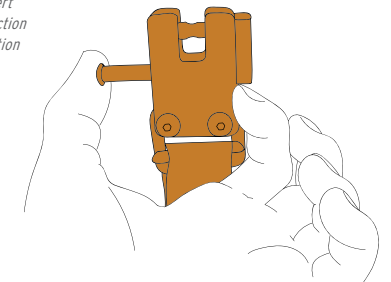
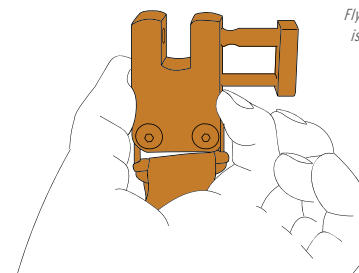
## THREE-BAR ADJUSTER

To adjust the straps, feed the loose end of the strap back into the buckle to create a loop of slack. Use the slack to feed the strap through the buckle to either loosen or to tighten, then pull the slack out of the buckle to lock in the correct sizing.



## QUICK CLIPS

Quick Clips can be opened by pressing on the plunger to open the gate. Do not block the tab on the front of the clip, as this will prevent it from opening. Insert Flywire and release the plunger. Check that connection is complete and free of clothing or other obstruction before lifting the performer.



## SIZING: SEAT HARNESS

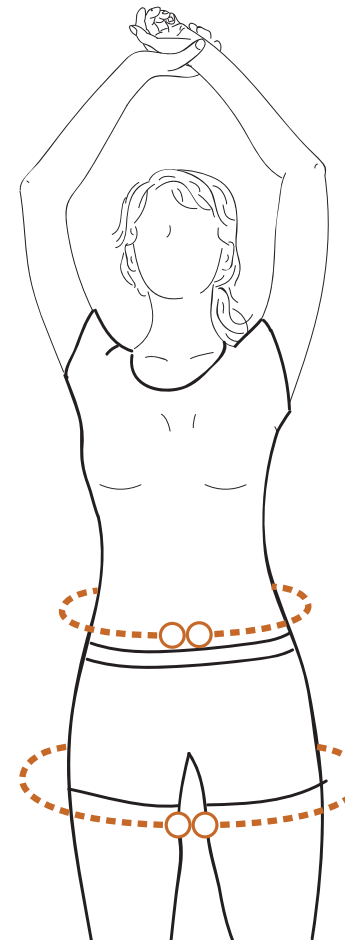
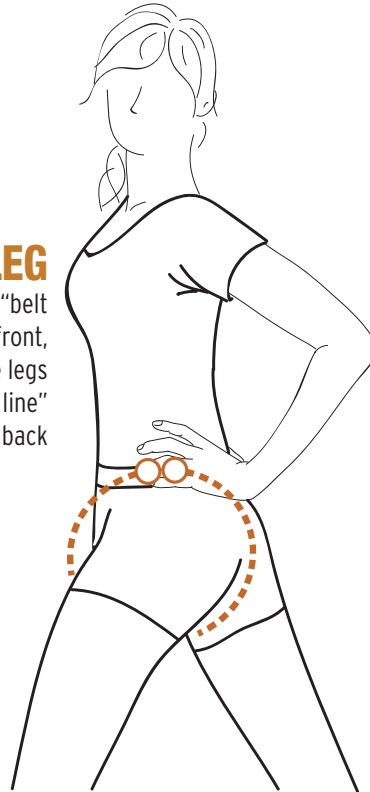
### SIZING:

Use the following measurement chart to select the proper harness size for your performer. Measurements listed are suggested guidelines only. Every performer's body is slightly different, and borderline performers may be able to wear harnesses of multiple sizes. If you are unsure about choosing the proper size for a harness, please contact the ZFX office at [harnesses@zfxflying.com](mailto:harnesses@zfxflying.com) for further assistance. **Maximum Weight is listed as a suggested limit for ideal performer comfort. This is not an indication of Working Load Limit for the harness itself. DO NOT EXCEED a maximum Working Load Limit of 136kg (300lbs) on any harness.**

When measuring for a seat harness, Leg, Belt and Widest measurements are the most important. Shoulder measurements are only necessary with the addition of shoulder straps, strongly recommended for smaller performers.

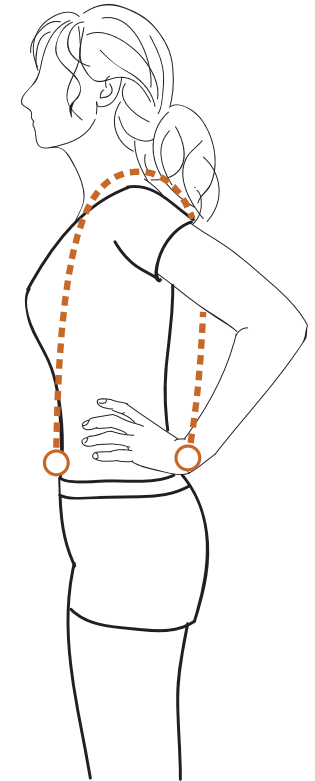
### LEG

From the "belt line" in the front, between the legs to the "belt line" on the back



### SHOULDER

From the "belt line" on the hips in front, over the shoulders to the "belt line" on the back



### BELT

On the "belt line" on top of the hips all the way around the waist

### WIDEST

Around the widest part of the lower body - including hips, waist and/or butt

	MAX WEIGHT	LEG	BELT	WIDEST	SHOULDER
MEDIUM	150 lbs	18-25 in	22-30 in	22-30 in	24-40 in
	68 kg	46-63 cm	56-76 cm	56-76 cm	61-101 cm
LARGE	300 lbs	19-29 in	27-39 in	27-39 in	24-40 in
	136 kg	48-73 cm	68-99 cm	68-99 cm	61-101 cm



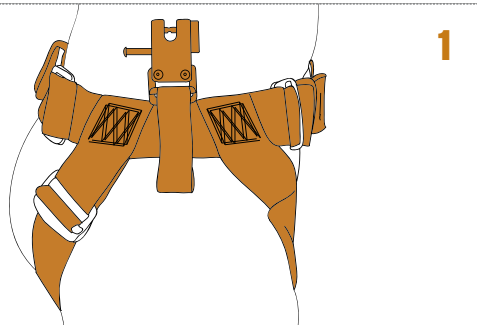
ZFX proudly employs American Craftsmen. We thank you for your support. When you see our seal, you know you have a product built with pride.

**IMPORTANT:**

When fitting any performer flying harness, remember that the harness should be tight but not overly uncomfortable and never painful. First do a ground fitting, firmly tightening all straps and buckles.

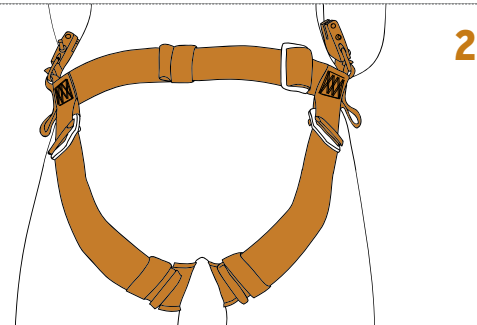
Second, do an air fitting by lifting the performer 30-60cm (1-2ft) above the ground and then tighten all straps and buckles a second time. The body will shift and settle into the harness once lifted.

Never consider a harness fitted with only ground tightening. **Remember, seat harnesses are not designed for flipping, somersaults, or laying horizontally.**



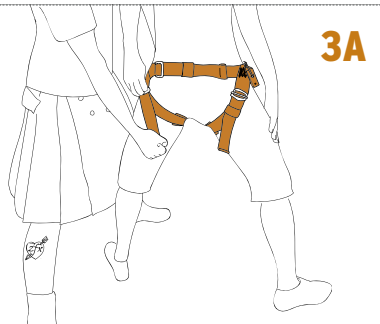
**QUICK CLIP PLACEMENT**

*Have the performer step into the harness and pull it up over their legs like putting on a pair of pants. Quick Clips should ideally be placed just above the performer's hip bone and centered on the side of their body, but can shift forward or back, depending on the look of the flight desired.*



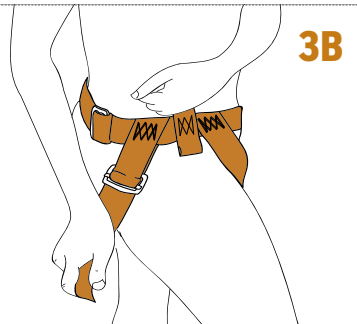
**STRAP PLACEMENT**

*The back strap should sit around the small of the performer's back. If the back strap is placed lower, the performer's weight may not be fully supported when leaning forward. The seat harness is not designed for flips or forward layouts. Tighten the back strap via the Three-Bar Adjuster Buckle so the Quick Clips will remain in place without being held.*



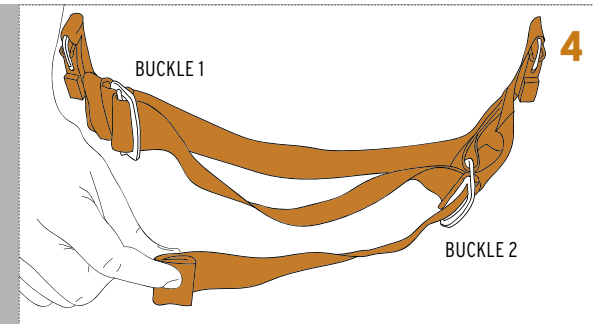
**TIGHTENING LEG STRAP - ASSISTED**

*To assist the performer in tightening the leg straps, have them assume a second position demi-plie pose. Anchor the harness with one hand while pulling down on the excess strap with the other.*



**TIGHTENING LEG STRAP - SELF**

*The performer can self-adjust the leg straps by lunging forward and reaching around the front of their body to pull down on the loose hanging strap. Hold onto the top of the harness with one hand and pull down on the excess leg strap to tighten.*

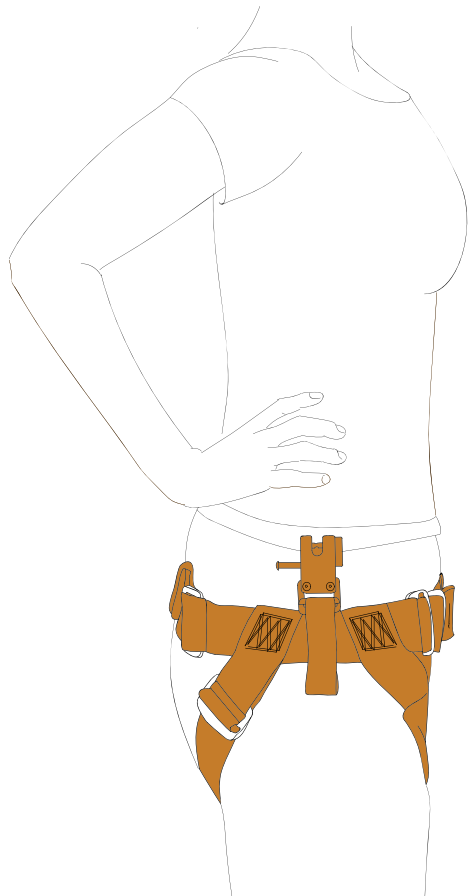


**TIGHTENING BELT STRAP**

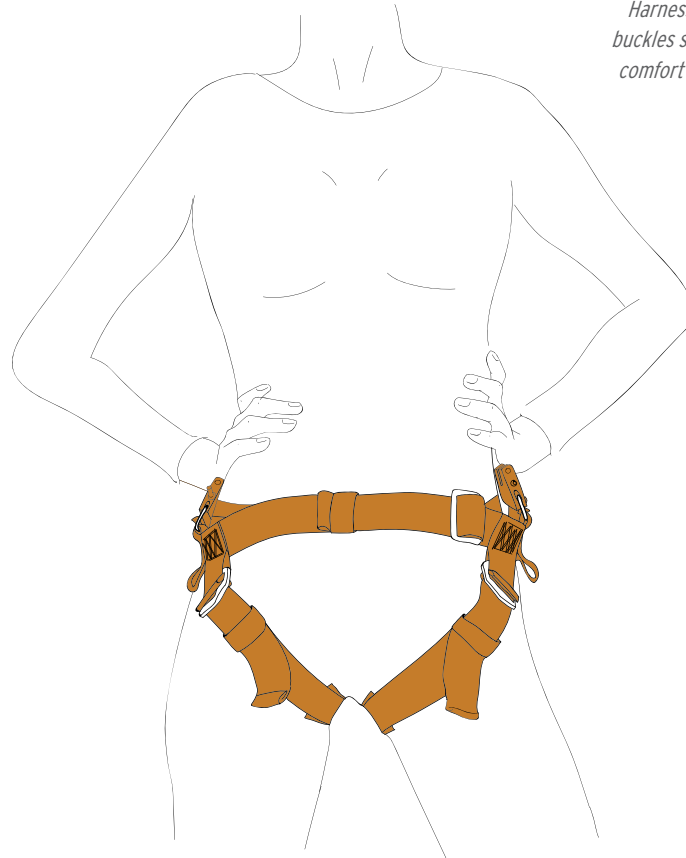
*The belt consists of one continuous strap running across the performer's front section twice, using two sliding buckles. To tighten, pull the strap snugly through the first buckle on the performer's right, then pull the slack created through the second buckle on the performer's left side. The belt should be about as tight as a seatbelt. To release, pull the buckle away from the front of the performer so it is perpendicular to the performer's body. The strap should loosen freely.*

## TROUBLESHOOTING: SEAT HARNESS

### EXAMPLES OF IMPROPER FIT



*Harness is too low. Performer's weight is not fully supported*



*Harness is on backwards. Leg buckles should go in the back for comfort and ease of tightening.*

WHAT DO I DO IF...	POSSIBLE SOLUTIONS
The performer is feeling pain or hot spots.	<ol style="list-style-type: none"> <li>1. Adjust all straps to reposition the harness.</li> <li>2. Re-fit the harness on the performer, checking strap positioning.</li> <li>3. Provide more padding.</li> </ol>
The excess straps are in the way of the performer.	<ol style="list-style-type: none"> <li>1. Place excess straps into the provided elastic band.</li> <li>2. Check that the harness size corresponds with the performer's measurements.</li> </ol> <p><b>**NEVER CUT STRAPS**</b></p>
Straps have come out of the buckles.	<ol style="list-style-type: none"> <li>1. NEVER cut off the endstop portions of the straps.</li> <li>2. Contact ZFX office for assistance.</li> </ol>
The Quick Clips will not open.	<ol style="list-style-type: none"> <li>1. Provide slack in the cable to release tension.</li> <li>2. Be sure you are not holding the flat, moveable tab on the side of the buckle and preventing the clip from opening fully.</li> </ol>
The Quick Clips will not close completely.	<ol style="list-style-type: none"> <li>1. Check that no costumes or hair are stuck in the clip, preventing closure of the clip.</li> <li>2. Contact ZFX office for assistance.</li> </ol>
The performer is unable to speak or breathe comfortably when lifted.	<ol style="list-style-type: none"> <li>1. Check all strap positioning for discomfort, loosen straps slightly and/or padding if needed.</li> <li>2. Loosen the waist band.</li> </ol>



# MAINTENANCE: HARNESS LIFE SHEET



**RECERTIFICATION - REQUIRED EVERY 12 MONTHS**

**RE-CERTIFICATION:**

Annual re-certifications must be recorded in the Life Sheet of the product by competent persons certified by the manufacturer (ZFX) or distributor. Any repairs should be done by a qualified person certified in the care of ZFX harnesses, and all adjustments should be noted on this Life Sheet, along with the ZFX approved re-certification when completed. This Life Sheet should be kept in the Maintenance Log. Please contact the ZFX office with any questions about conditions or repairs needed.

**LIFETIME:**

The product lifetime is 10 years from the date of purchase unless any defect appears. The following factors can reduce the lifetime of the product: intense use, damage to components of the product, contact with chemical substances, high temperatures, tears and abrasions, violent impacts, and/or failure to maintain as recommended. (Productions with an eight to ten performances per week production schedule should expect about a three year lifespan.) When it is suspected that the product is no longer safe and reliable, withdraw the harness from service immediately and contact ZFX or the distributor.

	DATE	INSPECTOR NAME/SIGNATURE	NOTES	ZFX OK
1				
2				
2 YEAR LIMITED WARRANTY EXPIRES				
3				
4				
5				
6				
7				
8				
9				
10				
END OF PRODUCT LIFETIME				

MODEL	SERIAL NUMBER	MANUFACTURE YEAR	PURCHASE DATE	DATE OF FIRST USE	USER:

# MAINTENANCE: INSPECTION SHEET

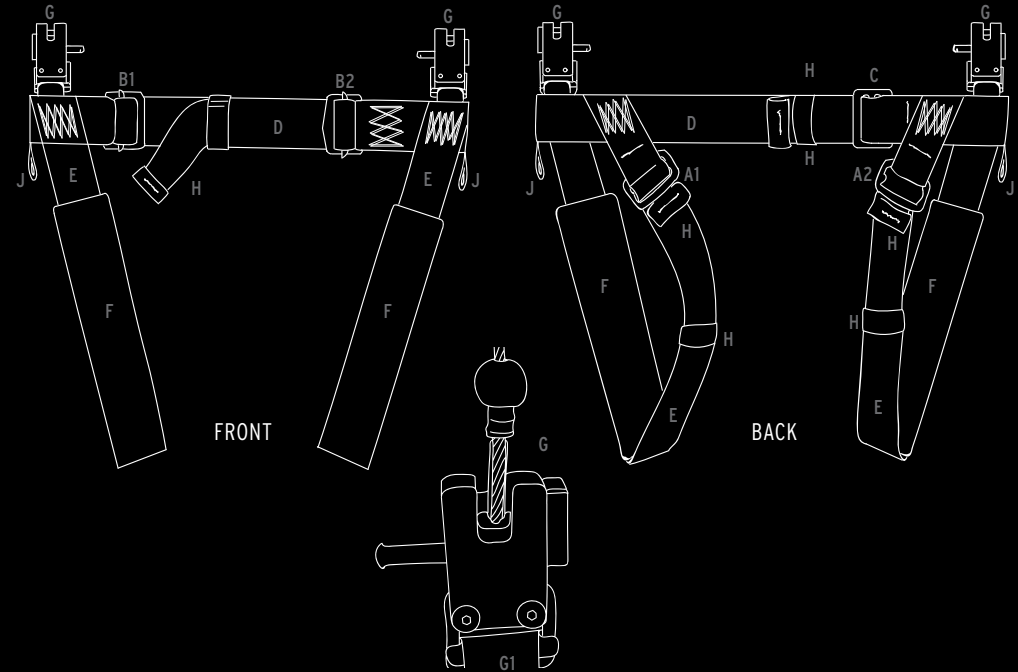
## INSPECTIONS:

ZFX harnesses must be visually inspected before each use. If the harness is being used on a regular basis (i.e. 4 or more performances a week over a period of several weeks), the harness should be formally inspected after a minimum of every ten uses.

Any product or component showing any defect or wear shall be withdrawn from service immediately.

If there is any doubt about the serviceability of any of these components, remove the harness from service and contact the ZFX office. For current harness updates and notices, the User is encouraged to check [www.zfxflying.com/harnesses](http://www.zfxflying.com/harnesses) on a monthly basis.

The chart below should be copied and kept on file by the User in a maintenance log. A downloadable version of the page is available at [www.zfxflying.com/harnesses](http://www.zfxflying.com/harnesses).



AREAS TO BE INSPECTED	LEGEND	BY	NOTES
Webbing - Frays, cuts, tears and holes	D, E		
Quick Clips - Inspect and verify connection webbing is secure	G1		
Quick Clips - Verify complete opening and closure	G		
Inspect all structural stitches for wear and loose joints	ALL		
Inspect Leg Adjuster Buckles and surrounding area for wear	A 1-2		
Inspect Front Adjuster Buckles and surrounding area for wear	B 1-2		
Inspect Back Adjuster Buckles and surrounding area for wear	C		
Padding and overall appearance	F, ALL		
Inspect Endstops and Endstop stitches	H		

HARNESS: \_\_\_\_\_ DATE: \_\_\_\_\_ INSPECTED BY: \_\_\_\_\_



flying effects  
[www.zfxflying.com](http://www.zfxflying.com)

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