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manual

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Tandem Passenger

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Thank you...

...for choosing Gin Gliders. We are confident you'll enjoy many rewarding experiences in the air with your GIN harness.

This manual contains important safety, performance and maintenance information. Read it before your first flight, keep it for reference, and please pass it on to the new owner if you ever re-sell your harness.

Any updates to this manual, or relevant safety information, will be published on our website: www.gingliders.com. You can also register for e-mail updates via our website.

GIN team
Happy flying and safe landings,



Warning

Like any extreme sport, paragliding involves unpredictable risks which may lead to injury or death. By choosing to fly, you assume the sole responsibility for those risks. You can minimize the risks by having the appropriate attitude, training and experience and by properly understanding, using and maintaining your equipment. Always seek to expand your knowledge and to develop self-reliance. If there is anything you do not understand, consult with your local dealer as a first point of contact, with the GIN importer in your country or with Gin Gliders directly.

Because it is impossible to anticipate every situation or condition that can occur while paragliding, this manual makes no representation about the safe use of the paragliding equipment under all conditions. Neither Gin Gliders nor the seller of GIN equipment can guarantee, or be held responsible for, the safety of yourself or anyone else.

Many countries have specific regulations or laws regarding paragliding activity. It's your responsibility to know and observe the regulations of the region where you fly.



About Gin Gliders

Dream

In forming Gin Gliders, designer and competition pilot Gin Seok Song had one simple dream: to make the best possible paragliding equipment that pilots all over the world would love to fly—whatever their ambitions.

At Gin Gliders, we bring together consultant aerodynamists, world cup pilots, engineers and paragliding school instructors, all dedicated to fulfilling this dream.

Touch

We're a "hands-on" company that puts continuous innovation and development at the centre of everything we do.

At our purpose-built R&D workshop at head office in Korea, we are able to design, manufacture, test-fly and modify prototypes all in a matter of hours. Our international R&D team is on hand both in Korea and at locations worldwide. This guarantees that your equipment has been thoroughly tested to cope with the toughest flying conditions.

Our own production facilities in East Asia ensure the quality of the finished product and also the well-being of our production staff.

Believe

We believe that the product should speak for itself. Only by flying can the pilots understand their equipment and develop trust and confidence in it. From this feeling comes safety, comfort, performance and fun. The grin when you land should say it all!



Introducing the Fuse Passenger

The Fuse passenger harness has been designed with several new features to improve safety, comfort and increase the life of the product while keeping all of the features you've grown to love in the Safari. For safety we made the airbag 20% larger to decrease the force of rough landings and increase the safety margin for accidents on launch. We incorporated the GIN Get-up-system for the leg and chest straps to prevent passengers from falling out of the harness by simplifying the 3 buckle system into 2 easy quick connects.

With the newly added seat plate you will gain better handling, increased comfort and better spine protection. We added a small foam pad in the rear of the harness to increase comfort and protect the passenger's spine from the pilot's seat plate in the event of a hard landing. The rear pocket on the passenger harness has been reduced in size to improve the pilot's comfort during flight. Extra storage space has been added to the pilot harness for convenience.



Specifications

The Fuse Passenger has EN and LTF certification.

Size

Pilot height (cm)	One size fits all
Weight (kg)*	3.1

Delivery package

- Airbag
- Seatplate
- 2 carabiners

* weight does not include carabiners and seatplate



Components of the Fuse Passenger

- Airbag



- Foam insert



- Skid guard



- Wooden seat plate



- Air inlet



- Velcro shoulder straps



Airbag

The Fuse features a 20% bigger airbag over its predecessor, the Safari. We redesigned the air intake by placing an extra port in the front of the seat, now the airbag will inflate in all flying conditions.

The airbag protection will reduce the impact force but it cannot completely eliminate the risk of injury.

Foam insert

We incorporated a new foam protector in the leading edge of the seat to improve inflation and add protection in the event of a hard landing.

Skid Guard

On the bottom of the airbag we have added an improved skid guard to protect the harness in the event of a rough landing or repeated landings on a rough surface. This extra, heavy duty fabric can be easily removed and replaced if ever worn or damaged.

Wooden seat plate

To add comfort and stability to the Fuse Passenger harness we incorporated a wooden seat plate that can easily be removed or replaced.



Air inlet

The air inlets of the Fuse Passenger harness are an important part of the airbag safety system. We have improved the side air inlets and added a new center air inlet to maximize the entry of air both before and during flight. The new center air inlet helps ensure the proper inflation of the airbag independant of the passenger position.

Velcro shoulder straps

The Fuse Passenger has been designed with Velcro along the top surface of the shoulder straps to offer the pilot an ideal location for a variometer, GPS, or even hand phone to be mounted. At the top of the shoulders there two small yellow webbing loops that allow the pilot to secure any instruments while in flight.



Before you fly

Make sure your dealer has checked the harness for completeness and basic settings. The foam inserts and seat plate have been pre-installed in your harness but should be verified for proper installation. Your harness must be assembled by a suitably qualified paragliding professional, for example, your instructor.



Spreader bar

The tandem spreader bars have been designed with a safety feature that prevents the main canopy from re-inflating after the reserve parachute has been deployed. By connecting the rescue bridle to the "B" and "C" risers the main canopy will be stalled into a more stable position for decent.

1 Rescue bridle

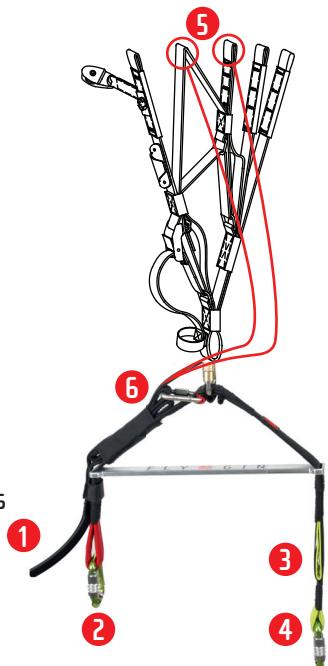
2 Pilot attachment
(RED LOOP)

3 Small passenger
attachment (LYME LOOP)

4 Large passenger
attachment (LYME LOOP)

5 "B" & "C" attachment points

6 Rescue carabiner
(RED LOOP)



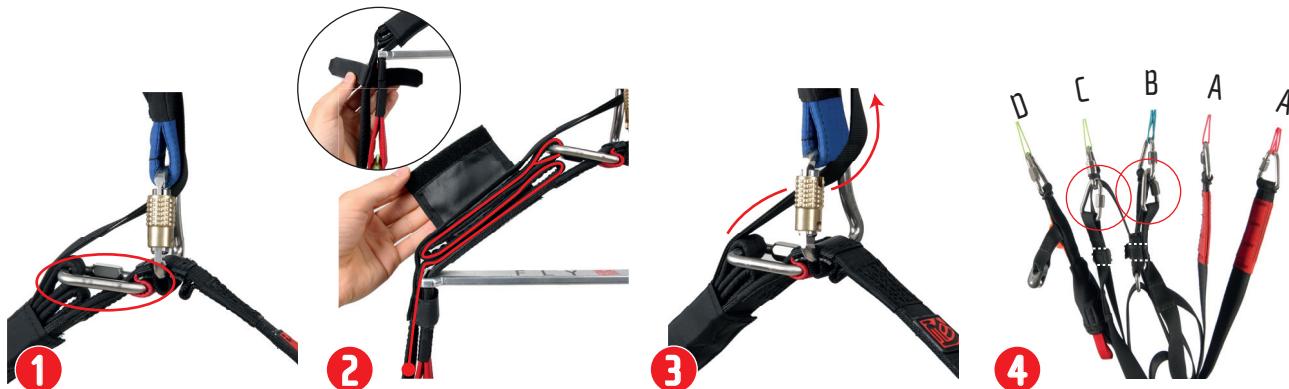
1 Rescue carabiner (RED LOOP)

2 Main carabiner (Small passenger)

3 Main carabiner (Larger passenger)

Bridle to spreader bar connection

Connect the rescue bridle in the following order. If you are not certain of the proper connection procedure then see your GIN dealer. If not connected properly then the bridle may fail, causing serious injury or death.



1 Connect the rescue bridle to the rescue carabiner

2 Fold the extra bridle webbing neatly and secure followed by the main line velcro

3 Pass the riser connections through the main carabiner

4 Attach bridle to the B & C riser carabiners and secure with the velcro straps

Storage

Back pocket

The Fuse Passenger has a large rear pocket to store the passengers belongings in flight. The size of this pocket has been designed to better fit the pilot and pilot harness.

Accessory Pockets

Located on the right side of the harness is a mesh pocket that is ideal for easy access items like a camera or snack. On the left side of the harness there is a zippered neoprene pocket to store more valuable items like a phone or wallet.



Adjustments

Adjust your harness to suit your physique and flying style. It is important to adjust it correctly to ensure you can easily slide into the sitting position after take off. A poorly adjusted harness can adversely affect the flying characteristics of your paraglider.

Perform adjustments before your first flight by hanging in a simulator and fine-tune the settings if necessary during your first few flights.

Shoulder Straps

The optimum setting for the shoulder straps depends on the height of the pilot. Stand upright with the chest/leg straps closed, and symmetrically adjust the shoulder straps until they are a snug fit, but not tight. To tighten, pull on the black and green loop forward and down. To loosen, pull the black webbing loop at the top of the shoulders up and backwards.



Chest Strap

The adjustment of the chest strap controls the distance between the carabiners and affects the handling and stability of the glider. Widening the distance between the carabiners increases feedback from the wing and allows for easier weight shifting. Closing the strap gives you a more stable feeling in turbulence but increases the risk of stable spiral and also the risk of twisting! The chest strap may also be adjusted in flight according to the conditions; for example, it may be tightened in turbulent air and flown at a looser setting in less turbulent or weak conditions.

To tighten, pull the large black and green loop to the right. To loosen, pull the black webbing strap to the left.

Leg Straps

The correct adjustment of the leg straps allows the pilot to easily reach the sitting position after take-off without using his hands. In the standing position, use the buckles under the chest strap to adjust the leg straps so that they fit comfortably without being tight; make sure you do it symmetrically. If you need to lengthen the leg straps, first check that the shoulder straps are not too tight. It is not normally necessary to make large adjustments from the default leg strap setting.

To tighten, pull down on the black webbing. To loosen pull up on the double buckle.

WARNING: Always maintain chest strap adjustments within the paraglider manufacturer's recommended range



Lateral Straps

The lateral straps adjust the angle between the thighs and the back. This angle can be set between 100° and 130°. Lengthening the straps increases the angle and vice-versa. The easiest way to adjust them correctly is during a flight in calm air. Remember that flying in the supine position (i.e. leaning back), reduces the stability of the harness and increases the risk of riser twists after a deflation.

Seat Straps

The seat straps change the depth of the seat. Adjust to find a comfortable position. In the sitting position, lengthen the straps to their maximum at first and then use the plastic buckles to shorten the straps to find a comfortable position with good back support. Lengthening the straps also helps you to slide easily into the harness at take off, while shortening the straps helps you to be in the standing position for landing.

Side Straps (control angle of seat)

The seat adjustment straps allow you to adjust the angle of the front of the seat. You can control the angle of the seat and the seat position with the straps beside the seat. To get the optimum setting you can loosen these straps to the maximum in the sitting position and start pulling the straps until you get the comfort from the leg support depending on the flying style of the pilot.



1 Lateral strap

2 Seat strap

3 Side strap

Flying with the Fuse Passenger

General warnings and advice

Before every flight, check the following:

Is your passenger in good physical and mental condition?

Are you within the certified weight range of your paraglider?

Does your passenger have the necessary valid insurance coverage (e.g. liability, medical, life)?

Is your equipment and choice of site suitable for your level of experience?

Does your passenger have a suitable helmet, gloves, boots, eye-wear and adequate clothing?

Is your passenger carrying some form of identification, so that people know who they are in case of an accident? Take along a radio and mobile phone if possible.

Pre-flight checks

As part of your normal pre-flight check routine, check:

Is there any damage to the harness or carabiners that could affect its airworthiness?

Are all buckles, belts, zips securely fastened? Buckles should click into place as you close them, and a gentle pull on the fastened buckle verifies this. Secure any zips after fastening the buckles. Take extra care in snowy or sandy environments.

Is the paraglider connected correctly to the harness and spreader bars with all carabiners secured by their locking mechanisms?

Are all pockets closed properly and any loose items tied down safely?

Is the air chamber intake open and clear?

Are your passengers leg and chest straps closed? Double check before you take off!

IMPORTANT: Use a complete and consistent system of pre-flight checks and repeat the same sequence every flight.



Landing with the Fuse Passenger

Before landing, slide your legs forward in the harness so that you adopt the standing position. NEVER land in the seated position—it is very dangerous even if you have back protection. Standing up before landing is an active effective safety precaution.

Miscellaneous

Towing

The Fuse Passenger can be used for towing with the proper accessories. Ask your dealer.

Tandem Flying

The Fuse Passenger is designed for tandem flying. See www.gingliders.com for details of our harnesses specifically designed for tandem flying.

Flying over water

The Fuse Passenger harness should not be flown over water. The Airbag will push the passenger under water and increases the risk of drowning in a water landing.



Maintenance and repairs

The materials used in this harness have been carefully selected for maximum durability. Nevertheless, keep your harness clean and airworthy to ensure the longest possible period of safe operation.

Care and maintenance

Don't drag your harness over rough or rocky ground. Avoid unnecessary exposure to UV rays, heat and humidity. Keep the folded harness in your rucksack when not in use.

Store all your equipment in a cool, dry place, and never put it away while damp or wet. Regularly clean off dirt with a plastic bristled brush and/or a damp cloth. If the harness gets exceptionally dirty, wash it with water and a mild soap. Make sure you first remove the entire sub-components. Allow the harness to dry naturally in a well ventilated area away from direct sunlight. Occasionally lubricate the zips and buckles with silicone spray, no more than once a year.

After a hard landing you must check your harness for damage.



Inspection checklist

In addition to regular pre-flight checks, your harness should be inspected thoroughly on every rescue repack of 150 days. Additional inspections should be performed after any crash, bad landing or take off, or if there are any signs of damage or undue wear. Always seek professional advice whenever in doubt.

The following checks should be carried out

Check all webbing, straps and buckles for wear and damage, especially the areas that are not easily seen, such as the inside of the carabiner hook-in points.

All sewing must be intact and any anomalies attended to immediately to avoid exacerbation of the problem.

The seat and back plates must be free from cracks.

The main aluminium carabiners must be replaced at least every 5 years or after 500 hours, whatever comes first. Impacts may create undetectable cracks that could result in structural failure under continuous load.

Repairs

The manufacturer or an approved specialist should carry out any repair that involves critical parts of the harness. This will ensure that the correct materials and repair techniques are used.



GIN quality and service

We take pride in the quality of our products and are committed to putting right any problems affecting the safety or function of your equipment and which are attributable to manufacturing faults. Your GIN dealer is your first point of contact if you have any problems with your equipment. If you are unable to contact your dealer or GIN importer, contact Gin Gliders directly via our website.

Care of the environment

We are privileged to fly in areas of outstanding natural beauty. Respect and preserve nature by minimizing your impact on the environment. When visiting an area, contact the local club for details of environmentally sensitive areas and local restrictions.

When your paraglider eventually reaches the end of its useful life, dispose of it with consideration and follow any local regulations.



Final words...

Most of us today live in a dependent society where we are regulated and protected. There are few opportunities for individuals to develop the self-responsibility that is the foundation of safety in extreme sports such as paragliding.

Most accidents are caused by getting into situations that are too demanding for your level of experience. This happens if you lack fundamental understanding, are incapable of assessing the risk or simply do not pay sufficient attention to your surroundings or your own state of mind.

To stay safe, the best you can do is to increase your understanding, skill and experience at a rate you can manage safely. There is no substitute for self-responsibility and good judgement.

In the end, paragliding offers a unique opportunity to learn to take control of your own destiny.
Memento mori, carpe diem!

Fly safely, and...E N J O Y!
GIN team



Technical data

Size	One Size
Pilot height [cm]	One size fits all
Height of attachment points [cm]	42
Carabiner distance [cm]	38-53cm
Weight [kg]*	3.1

Certification

The Fuse Passenger has EN and LTF certification, max load 120kg

Fuse Passenger harness: [EN] PH 097.2013, [LTF] GZ 097.2013

Back protection

Airbag

* - weight does not include carabiners and seat plate



Materials

Harness fabric

Inner Inside: OXFORD 210D PU

Webbing

NYLON-66 25mm / 30mm

Buckles

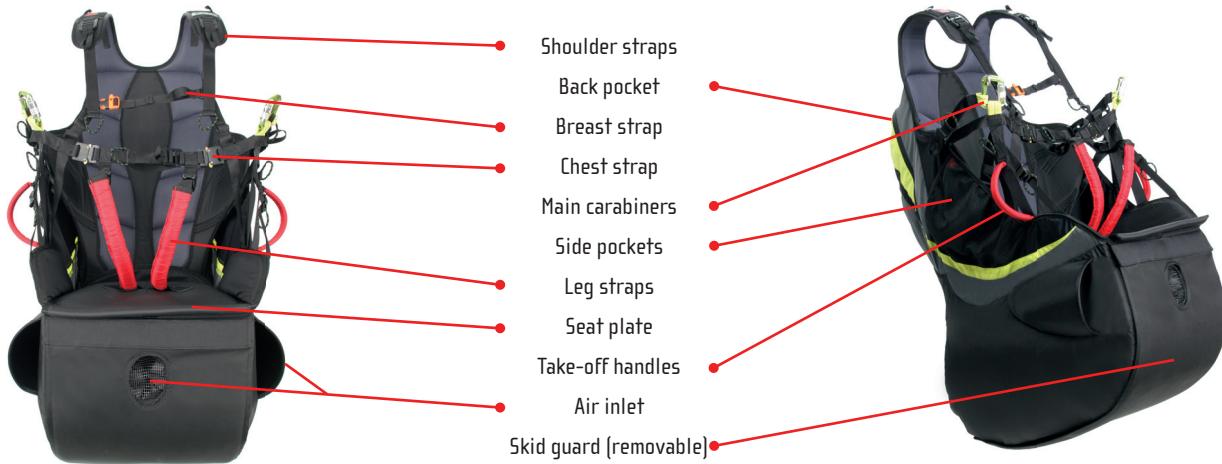
FC24B COBRA FIX -28MM, 3MM SLIDER BUCKLE / 3MM LOOP

Thread

P/F 630 D/9 Bonded, P/F 280 D/3 & 420 D/3 Bonded POLYESTER



Fuse passenger harness





www.gingliders.com

G I N

Dream. Touch. Believe.