

# GIN



## **User** manual

v1.1 - 09/2016



Lightweight Tandem

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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.

Happy flying and safe landings, GIN team

## 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 center 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 wellbeing 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 Safari 2 Pilot

The Safari 2 Pilot is for both professional and leisure tandem pilots who are looking for a harness that's lightweight, compact and easy-to-use.

The Safari 2 Pilot weighs only 2.6kg (including moussebag) and is made of high quality, durable materials. It's compact and streamlined, yet offers excellent comfort in the air. There are no pressure points, even on longer flights.

Storage and pockets have been well thought-out. There are 2 new side pockets with loops for a selfie stick, besides a large back pocket with integrated radio pocket.

The harness also includes improved safety features. There is a new buckle for the leg loops which ensure that the buckles cannot be connected incorrectly. Back protection is a 14cm moussebag and the dorsal rescue container is designed for rapid and easy deployment. The split leg design makes the harness easy to move with on the ground and easy to get into after take-off.

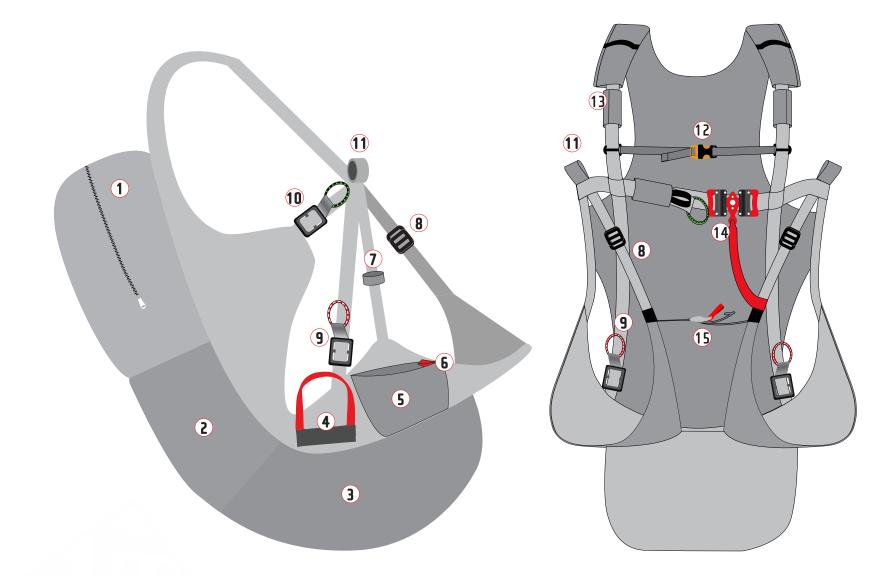
## **Technical Specifications**

The Safari 2 Pilot is EN and LTF certified.

Size	One Size
Weight (kg)	2.6
Height of attachment points (cm)	42
Carabiner distance (cm)	34-46
<b>Certification</b> The Safari2 Pilot has EN and LTF certification, max load 120 daN Safari 2 Pilot harness: (EN/LTF) EAPR-GZ-0493/16 <b>Parachute container</b> Integrated container behind seat <b>Back protection</b> 17cm mousse bag	
Delivery package 1 Harness 1 Rescue deployment handle 2 GIN 30mm carabiners 1 Foam back protector	

## Harness diagram

- 1. Back Pocket
- 2. Rescue Container
- 3. Back Protector
- 4. Rescue Handle
- 5. Camera Pocket
- 6. Camera Safety Loop
- 7. Selfie Stick Loop
- 8. King Snaps Buckle
- 9. Shoulder Adjustment
- 10. Lateral Strap
- 11. Hooking Points
- 12. Breast Buckle
- 13. Velcro Bridle Cover
- 14. T-Lock Safety Buckle
- 15. Leg Adjustment



#### **Optional Extras**

Yeti rescue #50 or #60



Safari Passenger 2 harness



Tandem rescue bridle

Spreader bar 30cm

Supple Spreader

For up-to-date information on additional accessories, visit www.gingliders.com.

## Before you fly

Make sure your harness has been check by a professional authorised by GIN for completeness and basic settings. Your harness must be assembled by a suitably qualified paragliding professional.

#### Rescue Installation and compatibility check

Gin Gliders recommend that rescue installation is performed properly by a competent person. The rescue parachute is a pilots last resort and failure to pack or connect the reserve parachute in the correct way may cause death or severe injury. The pilot is responsible for ensuring proper installation.

This harness is compatible with the Yeti #50 and #60 rescue parachutes. Other manufacturers' rescues may also be used but we cannot guarantee their function. The pilot is responsible for checking compatibility.

Every installation of a rescue system into the harness must be checked by a qualified paragliding professional for compatibility. To verify the installation, you must perform a test deployment by sitting in a simulator. Make sure that the rescue parachute can be released from the rescue container—it must be done by you, the pilot, sitting in the harness hanging from a simulator. The pilot should be able to pull the rescue free from the harness with one hand. If the rescue becomes stuck or is difficult to extract from the rescue container then the harness and rescue may not be compatible and should not be used together.

WARNING: If you are in any doubt about any aspect of rescue installation, seek a professional authorised by GIN for assistance.

IMPORTANT: You must perform a test deployment from a simulator to verify the installation.

#### Attaching the rescue deployment bag to the harness deployment handle

The rescue container for this harness comes with its own deployment handle. This handle and its strap must be connected to the deployment bag of the parachute. In particular, check the length of the strap connecting the rescue deployment handle to the rescue inner container. It should be long enough that the reserve can be extracted without the danger of the pins not being pulled before the strap tightens on the reserve, but not so long that there is excessive slack that extends the movement required for deployment.

The deployment bag of other manufacturers' rescue systems (i.e. non-GIN rescue systems) may have different loop positions which may cause a deployment failure. Be sure to contact your parachute dealer or a qualified professional to check the connection, position and secure deployment, and refer to the rescue manual for details.



Handle attachment







Pass the handle through the center loop

Pass the handle through itself

Pull to make a clean, tight knot

#### Connecting the rescue bridle

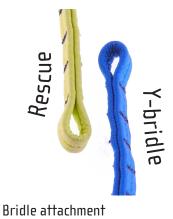
To connect a rescue to your harness we recommend using a GIN Rescue Carabiner. If you choose to use different type of connector, it should be rated at least 9 times the maximum weight. For example, our recommended 8mm Stainless Steel screwgate maillon (square) connector has a minimum breaking load of 28kN (2855 Kqf). It is the pilot's responsibility to check the compatibility of the rescue system and ensure that it is installed properly.

Be sure to inspect your connector during normal maintenance and safety checks. Replace it whenever there are any signs of wear, and check your rescue system with a professional after any deployment. We recommend that you cover the connection using the Maillon rapid cover to prevent excess friction. Rubberbands should also be used to secure the attachment and prevent excess friction.

Recommended: 8mm stainless steel screwgate maillon

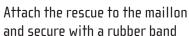
8mm square maillon Breaking load: 24kN

Maillon connection (Recommended by Gin Gliders)





Attach the bridle to the maillon and secure it with a rubber band



Must be made tight, finish by making 1/4 turn with a tool

WARNING: When connecting the rescue bridle be sure to secure the connection using tape, rubber bands or heat shrink wrap. If the lines are not secure they may burn or cut from excess friction.

#### **Rescue installation guide**

The Safari 2 Pilot rescue is located behind the pilot's seat. The handle can be placed on the left or right side with a velcro bridle tunnel running along both sides of the harness to allow the pilot to customize the harness to their needs. It is very important to properly install the rescue parachute. If the parachute is not folded correctly or the lines are not placed properly, then a serious if not fatal accident could result. If you have any doubts speak with your instructor or GIN dealer.

#### Main rescue installation guide

Begin by first connecting the rescue bridle and the rescue handle to the rescue parachute . Install the rescue into the harness with the handle connection FACING OUT and the extra para line neatly folded on the bottom of the container. Be sure that the inner bag is installed so the rescue handle loop is facing the opening of the rescue container.

Using the closing line provided with your harness, pull the built-in loops through the grommets of the rescue container flaps. Close the rescue container flaps in the order shown. Secure the rescue container flaps by placing the metal release pins through the loops as shown.



WARNING: When installing the reserve make sure the reserve handle is up and the reserve lines are facing down.







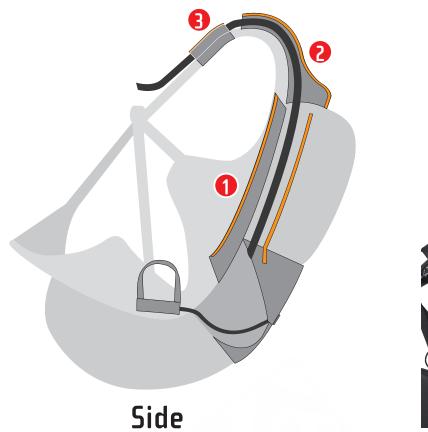
#### **Rescue bridle installation**

#### Bridle tunnel

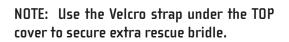
After installing the rescue into your harness, run the rescue bridle through the bridle tunnel on both sides of the harness.

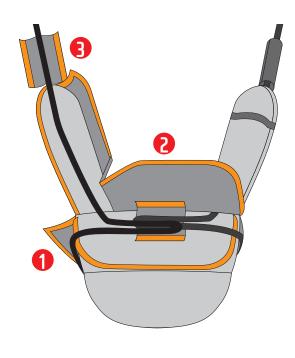
1) Velcro SIDE cover

- 2) Velcro TOP cover
- 3) Velcro SHOULDER strap cover





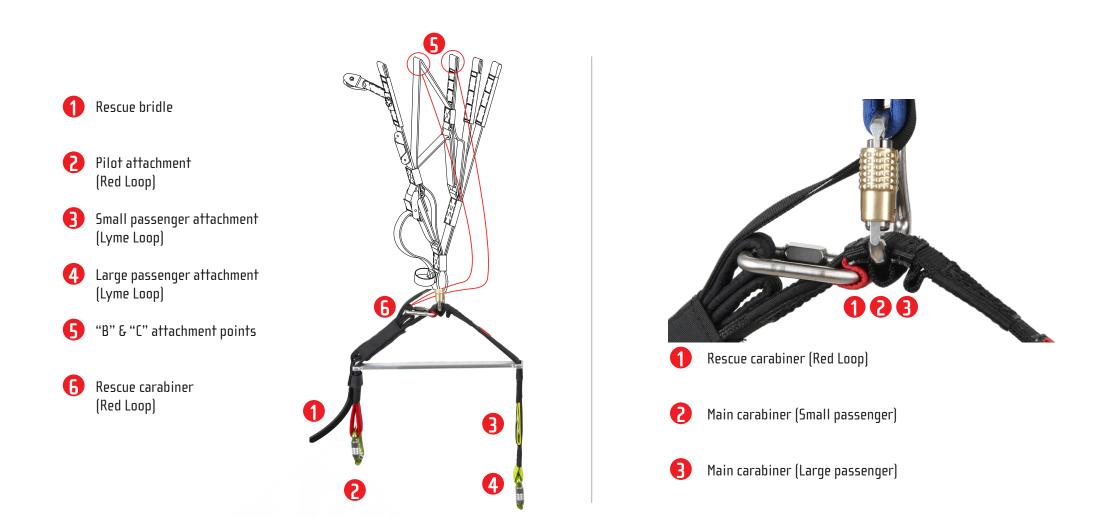




Тор

#### 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 descent.



#### 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.



Connect the rescue bridle to the rescue carabiner

Fold the extra bridle webbing neatly and secure with the Velcro cover followed by the main line Velcro

Pass the riser connections through the main carabiner

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

\* Shown with a GIN Fuse riser, check compatibility with your riser

#### **Back protector installation**

- To install the back protector in the Safari 2 Pilot:
- 1) Open the zipper on the RIGHT side of the harness.
- 2) Insert the back protector with the front end first
- 3) Rotate the protector inside the harness until it fits neatly inside the protector compartment.





#### 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 (1)

The optimum setting for the shoulder straps depends on the height of the pilot. Step into the harness and stand upright with the breast strap closed, symmetrically adjust the shoulder straps until they are a snug fit, but not tight.

To tighten: pull up on the RED loop

To loosen: pull down on the BLACK loop

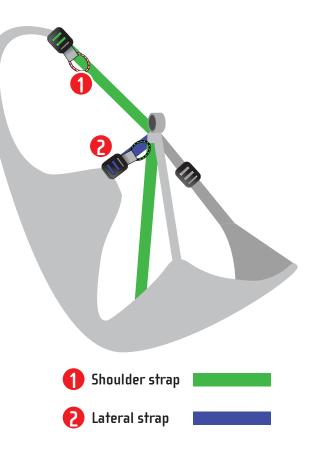
#### Lateral Straps (2)

The lateral straps adjust the angle between the thighs and the back. 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.

To tighten, pull forward on BLACK and GREEN loop. To loosen, pull back on the BLACK loop.

#### Breast strap

After adjusting the shoulder straps, place the breast strap in a comfortable position and tighten so there is slight pressure on the shoulder straps.



#### Storage

#### Back pocket

The back pocket is designed to store the pilot's fast packing bag or other light accessories during flight. **Radio Pocket** 

Located inside of the back pocket is a radio pocket with a Velcro cover. At the top of the back pocket there are 2 holes that can be used for a radio wire.

#### Side pocket

Located on both sides of the harness are two open pockets that can be used to store a small digital camera with a "selfie stick." Located above the pockets are 2 elastic loops that can be used to secure the selfie stick during takeoff and landing. Inside the open pocket is a webbing loop that can be used to anchor your camera.





## Flying with the Safari 2 Pilot

#### General warnings and advice

Before every flight, check the following:

☑Are you in good physical and mental condition?

☑Are you familiar and compliant with all applicable laws and regulations in your area?

Are you briefed thoroughly about the site, airspace and expected weather conditions of the day?

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

☑Do you have a suitable helmet, gloves, boots, eye-wear and adequate clothing?

☑Are you carrying some form of identification, so that people know who you are in case of an accident? Take along a radio and mobile phone if possible.

☑Do you fully understand how to safely use your new equipment? If not, have your instructor or dealer explain anything you are not sure about.

When you go for your first flight on your new harness, be sure to pick a day and site that does not present you with any unfamiliar challenges. During your first flight, familiarize yourself with the in-flight characteristics of your new harness.

#### 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?

☑Is the rescue parachute container closed correctly with the pins in the right position?

☑Is the deployment handle correctly inserted or attached?

☑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 with both carabiners secured by their locking mechanisms?

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

☑Have you closed your leg and chest straps? Double check before you take off!

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

NOTE: If you have any doubt about your harness then you should not fly until you have consulted an expert.

#### **Rescue Deployment**

In the event of an emergency, you must quickly evaluate your height and the seriousness of the incident. A seconds hesitation in deploying the reserve could prove fatal if there is insufficient height.

If you decide to deploy the rescue:

- 1) Look for the rescue handle and grasp it firmly with one hand
- 2) Pull forwards and upwards on the handle to release the deployment bag from the rescue container.
- 3) In a continuous motion, throw (and RELEASE!) the rescue away from yourself and the glider,

preferably into the air stream or against the direction of spin. After deployment, avoid entanglement and pendulum motions by promptly pulling in the glider.

4) On landing take an upright body position and be prepared to do a PLF (Parachute Landing Fall) to minimize the risk of injury.

#### Landing with the Safari 2 Pilot

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.

#### Miscellaneous

#### Towing

This harness can be used for towed launches. The tow bridle release should be hooked directly to the main carabiners, ensuring that the carabiners are positioned with the opening bar facing the rear. For further details, refer to the documentation provided with your tow release, or ask a qualified towing instructor at your flying site.

#### **Tandem Flying**

The Safari 2 Pilot is designed specifically for tandem flying. We recommend pairing the harness with the Safari 2 Passenger harness. See www.gingliders.com for further details.

#### Flying over water

Water landings should be avoided at all costs, as the back protection increases the risk of the pilot floating in a head-down position.

IMPORTANT: In normal flight, periodically feel the position of the rescue handle so that the action of reaching for the rescue handle is instinctive in an emergency.

WARNING: During any incident in flight, always monitor your altitude. If you have any doubt that you have sufficient height for recovery, deploy your reserve without hesitation. "If low, then throw".

NOTE: After any rescue deployment, it is essential to have your harness thoroughly inspected by a qualified professional to be sure there is no damage to the rescue connection points, rescue bridle or any other parts.

### 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. Make sure you first remove the entire sub-components for example, rescue parachute etc. Allow the harness to dry naturally in a well ventilated area away from direct sunlight. If your rescue parachute ever gets wet (e.g. in a water landing) you must separate it from the harness, dry it and repack it before putting it back in its separate deployment bag.

After a hard landing you must check your harness and back prtector for damage, pay close attention to the rescue container and verify all of the attachments are secure.

#### Inspection checklist

The pilot should perform the followibng inspection on every repack of the rescue and should be checked by a professional after 24 months or 200 hours of flying (whichever comes's first). 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, such as open seams, tearing or cutting, especially the areas that are not easily seen.

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

☑Special attention should be paid to the rescue installation, particularly the elastic and Velcro parts.

☑The main 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.

IMPORTANT: Any repairs should only be carried out by the manufacturer or by an approved agent. This will ensure that the correct materials and repair techniques are used. A careful visual inspection of the protector should be made, airbags should be filled with air and checked for leaks, mousebag should be inspected for tears and foam recovery.

#### 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.

#### Storage

Stored at a temperature between 10° and 25° C and in relative humidity between 50 and 75%. Make sure too that the harness is not stored in a place where animals such as mice or cats could use it as a place to sleep.

Do not store the harness near any chemicals, including water. Petrol, for example, causes the material to disintegrate and can cause considerable damage to your harness. When your equipment is in the car boot, keep it as far away as possible from any spare petrol cans or oil containers.

The harness should not be exposed to extreme heat (e.g. in the car during summer). High temperatures accelerate the process of hydrolysis, particularly when combined with moisture, which damages fibers and coating. Do not store your harness near radiators or other heat sources.

#### **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. GIN lifetime guarantee

Gin Gliders are proud to guarantee the quality, craftsmanship and performance of all our products. Equipment with defects in materials or manufacturing will be repaired or replaced at the discretion of Gin Gliders for the practical lifetime of the product. Equipment damaged through wear and tear, misuse or neglect may be repaired at a nominal charge.

If you have any problems with your equipment, please contact your GIN dealer in the first instance, or 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.

Gin Gliders gives consideration to the entire life cycle of its harnesses, the last stage of which is recycling in an environmentally-friendly manner. The synthetic materials used in a harness must be disposed of properly. If you are not able to arrange appropriate disposal, Gin Gliders will be happy to recycle the harness for you. Send the harness with a short note to this effect to Gin Gliders Inc.

## 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 judgment.

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

#### Inspections and repairs overview

Date	Work carried out	General conditions on delivery	Completed by (name)	Stamp and signature



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