

CG-1000 OWNERS MANUAL

Your CG-1000 is a sophisticated harness which will give you years of good service, provided that you treat it properly and always maintain respect for the demands and dangers of flying. You are reminded that product liability insurance is not available for manufacturers of hang glider equipment, and that you fly with any harness at your own risk.

INTRODUCTION AND FEATURES

The CG-1000 has an in-flight-adjustable center of gravity (CG) unit. This consists of a single suspension line connected to an internal frame by means of a sliding ring. This sliding ring allows the pilot to change his body pitch angle simply by pushing on the stirrup. The stirrup line pulls the sliding ring which causes the pilot's pitch angle to change thus keeping the pilot's center of mass in line with the suspension line. The single suspension line and low frontal profile keeps the drag coefficient to a minimum.

The backup suspension line is continuous with the waist, shoulder, and leg straps. This line also protects the main suspension line and parachute line from abrasion and UV exposure.

The internal frame gives maximum comfort by eliminating "suspension line squeeze".

We feel all these features combine to make the CG-1000 the best harness available in terms of comfort and low drag.

INITIAL HARNESS SET UP AND COMFORT ADJUSTMENT

Before flying, pilot should hang from a suitable place and make sure the harness is adjusted properly.

Parachute installation:

Pack parachute into the parachute pocket located on the front of the harness. Follow parachute manufacturer's instructions concerning where to place chute, cords, and main lines. The Cg-1000 is made to accept parachutes designed for hand deployment via a deployment bag.

After the parachute is packed in the lower compartment, and secured with the safety pins, run the bridle line out the lower right hand side, and over the top of the harness through the velcro cover strip. Bridle line can then be run up through the inside of the backup line with the suspension line, making sure all three lines (parachute, suspension, and backup lines) are attached to the carabiner. Leave sufficient slack in the bridle line where it passes the CG slider ring, allowing the ring to work freely. This slack can then be stuffed inside the slit to insure clean airflow and free movement. Backup line is designed to separate where sewn together in case of deployment.

IMPORTANT!!!

Carabiner should be fastened through ALL THREE LINES:

suspension line, backup line AND parachute bridle.

Comfort Adjustments:

There are two main adjustment points;

1. CENTER OF GRAVITY SLIDER LINE
2. SHOULDER STRAPS

Find the CENTER OF GRAVITY SLIDER LINE adjustment connection (knot in nylon cord). The slider line is continuous and adjusts at the connection. Adjust line so that while in head up position (slider to front of slot) you have enough foot pressure to lift hips and zip doors without forcing zipper. But not so much that your knees are bent and head goes down. Pilot should then be able to push on stirrup with toes and level out to a relaxed position with little stirrup pressure. It should take some effort to push stirrup all the way back to tip head down.

Adjust SHOULDER STRAPS so that you are comfortable and shoulders don't sag and that you don't feel any tightness around your armpit. Once you find that ideal setting, you should not have to ever readjust.

MAIN SUSPENSION LINE AND HANGING IN GLIDER

Carabiner should be fastened through PARACHUTE main suspension line, HARNESS main suspension line (red), and HARNESS outer backup line (black).

The harness should hang high enough above the control bar base tube to allow for head low pitch position of the harness. We suggest that you try the following tip to help you determine the ideal hang height:

Have a friend hold the nose of your glider for a prone check. With your body/harness hanging level adjust hang height so that you hang 5 to 10 inches above the base tube. Then place the palms of your hands on the base tube and have your friend raise and lower the nose. Feel for what feel comfortable when going through the full range of your glider's pitch motion.

Hang height can be adjusted by either changing the hang loop that is on the glider or changing the main suspension line that is in the harness.

ENTERING HARNESS

- Unzip the access zipper which can be found along side the parachute pocket.
- Unclip the safety buckles.
- Put harness on like a jacket.
- Locate and fasten both leg straps to what ever feels comfortable.
- Clip both safety buckles.
- Swing parachute pocket over chest.
- Engage zipper halves and pull zipper-pull down to close harness.
- At full closed position anchor zipper-pull with the velcro strap.

Now you are ready for your preflight check.

STORAGE AREA AND POCKETS

Glider bag storage is located on the back of the harness right below the CG slider lines. Fold the glider bag as flat and neat as possible, slide it evenly into the pocket, and zip up.

Small glider paraphernalia such as glider ties, batten bag and etc. Should be put in the Harness Bag. Zip close harness bag and stuff into the tail of the harness.

There is a zippered pocket above your parachute for any items wanted during your flight.

All filled storage areas will enhance the shape of the harness.

PREFLIGHT CHECKLIST

Before each flight, make the following harness checks:

1. Carabiner is through main suspension, backup, and bridle lines.
2. Carabiner is locked to glider.
3. Shoulder straps in the proper position.
4. Leg straps secured.
5. Parachute secured.
6. Landing gear doors are unzipped and lines cleared.
7. Make sure the CG slider ring is at the front of the slot.
8. Assure that all pocket zippers and flaps are closed.

FLIGHT OPERATIONS

Before flying, pilot should familiarize themselves with the zipper lines, and the fact that the leg door zipper is velcroed on and can be ripped off in case of emergency.

The landing gear doors zip open and closed by means of two pull cords with a recoil on each.

With no boot to hold out of the way, takeoff is straight forward. Once you are clear of the ground, simply put your feet (one at a time) into the end of the harness and onto the stirrup. Pull the “close zipper” knob. Landing gear doors are free and clear. Pull the “close zipper” knob until the doors are fully zipped. Release the knob and a bungee will automatically retract the cord.

Now that you’re zipped in and proned out, you can lower your body pitch angle simply by pushing a little harder on the stirrup. To raise your body pitch angle, relax your pressure on the stirrup and push up on the control bar. This causes the CG slider ring to slide towards your head allowing a higher body pitch trim angle.

OPEN LEG DOORS EARLY. When you’re ready to land, pull the “open zipper” knob. Release the knob and a bungee will retract the cord. Remove your feet from the stirrup and push your knees through the open zipper and spread them. This will force the zipper to open all the way if it isn’t already. If the zipper should ever jam, you can tear open the velcro that runs along-side the zipper. Step out of the boot (releasing stirrup pressure), flip up, and land as usual. The CG-1000 tends to lean the pilot forward when in the upright position and will aid the pilot’s ability to push out when landing.

Once landed, tail loop can be clipped into the carabiner to keep the tail from dragging while walking.

CARE AND STORAGE OF HARNESS

Your CG-1000 will give you years of good service provided that you treat it properly.

Harness should be stored in the harness bag with leg door zipper in the open position, and the parachute towards the inside. Any unnecessary creases should be avoided.

Your harness should be kept clean, dry, and out of the sun as much as possible.

To remove any dirt: wash with a mild soap and water, rinse, and hang by the tail to air dry.

Thoroughly inspect the harness periodically. Look for broken stitches, frayed webbing, frayed lines, and loose knots. Remove the internal frame and inspect. This is done by removing the line at the lower end of the frame pocket (this line should always be tight around the frame to keep in from sliding in the pocket). CG slider lines go over the top of the frame. Any lines or webbing with signs of wear should be replaced.

Return the harness to the factory for any needed repair work.

When harness is not going to be used for a long period of time it should be hung by the tail or laid out straight so that it will regain its original shape.

CG TIPS AND TROUBLE SHOOT:

Please remember that all minor adjustments can effect other adjustments. Like your glider, the CG-1000 is a design of compromises. Always adjust one thing at a time in little increments and test for result before making another change.

1. Having trouble zipping doors up?

You need more stirrup pressure to lift hips. Zip door up before or while you are pushing with feet to tip down. Stirrup should be worked with toes, boots do not work well.

2. Armpit discomfort?

Tighten leg straps and/or loosen the shoulder straps. This moves your body forward in the harness and puts a little gap below the bottom of the armpit armhole.

3. Need more vertical position for landing?

Try setting your leg straps a little bit looser. This will allow your body to slide down in the harness when you go vertical. The further you slide, the more vertical your final position.

4. Not hanging "head low" enough after pushing on stirrup?

Shoulder straps can be undone to slide CG downward.