

Equipment Handbook for Parachute System V1R1 “EVO”



Manufacturer:

409 N. MAIN ST
ELOY AZ 85131
USA

Telephone +1 520 350 7333 Fax +1 520 466 1199

E-mail: usa@flyfirebird.com
www.flyfirebird.com

written by / date:

proved by / date:

Signature:

Signature:

Table of Contents	Page
Main Page	
Register of valid Pages	02
Table of Contents	03
1. Forward	05
2. Description of Container System	06
3. Description of Rush Reserve Parachute	06
4. System Operating Data	06
5. Technical Data Rush	07
6. Compatibility Chart	07
7. Canopy / Parachute	07
8. Harness and Container	08
9. Parts List	09
10. Maintenance Instruction	10
Fabric testing	
Repack cycles	
11. Assembly	10
The hand deployment with kill-line	11
How to mount softlinks to your canopy	13
How to use supertack to fix softlinks	14
12. Periodic Inspection Instructions	15
13. Maintenance and Storage	16
14. Cleaning	16
15. Alterations and Replacement	16
16. Periodic Inspection Instructions, Parachute	17
17. Packing the Parachute	18
18. Installation of an Automatic Activation Device (AAD)	19
Routing of the reserve loop	20

Table of Contents	Page
19. Pre-Inspection Before Each Packing of the Parachute	22
20. Packing Procedures, Rush Reserve Parachute	22
21. Reserve Static Line (RSL)	33
22. Packing Instructions for the EVO Main Container	34
23. Pullout - Main parachute opening system	53
24. Options Student Rig	58
25. Packing the student main canopy	61
26. Main override device (MOD)	64
27. Mounting the Main override device MOD	67
28. Prejump inspection before each jump	73
29. Putting on the Parachute	75
30. Manual Activation of the Main Parachute	75
31. Manual Activation of the Reserve Parachute	76
32. Allowable Service Life	76
33. How to order spare parts	77
Address	78

1. Forward

!!! WARNING !!!

This article meets the minimum performance and quality control standards required by a technical standard order (TSO).

Installation of this article requires separate approval.

Use of this equipment in the United States and its territories should be in accordance with all USPA Basic Safety Requirement's (BSR's) included within USPA Skydivers Information manual (SIM), Section 2: Basic Safety Requirements and Waivers.

Use of this equipment outside of the United States should be in accordance with the controlling body for parachuting and skydiving in the country in which the equipment will be used & operated.

If you use your Firebird product, or if you allow someone else to use it, you are acknowledging sport parachuting risk and accepting the fact that this equipment and its components may malfunction. If you are not willing to accept the risks of sport parachuting, or if you are not willing to accept the possibility that your Firebird product or its components may malfunction and perhaps cause you to be injured or killed, then we recommend you to NOT use it.

DISCLAIMER – NO WARRANTY

Because of the unavoidable danger associated with the use of this harness and container assembly, the manufacturer (Firebird USA LLC) makes no warranty, either expressed or implied. This rig is sold with all faults and without any warranty of fitness for any purpose. The manufacturer also disclaims any liability in tort for damages, direct or consequential, including personal injuries, resulting from a malfunction or from a defect in design, material, workmanship or manufacturing whether caused by negligence on the part of the manufacturer or otherwise. By using this rig, or allowing it to be used by others, the buyer waives any liability for personal injuries or other damages arising from such use.

If the buyer declines to waive liability on the part of the manufacturer, buyer may obtain a full refund on the purchase price by returning the parachute harness and container, before it is used, to the manufacturer within 30 days from the date of original purchase with a letter stating why it was returned.

Save this manual, your rigger may not have an applicable manual and will need it to service your Firebird product.

This handbook applies to the parachute system V1R1.

This includes the EVO Harness/Container as well as EVO STUDENT and the RUSH reserve canopy

Unauthorized modifications or alterations will void the warranty and the TSO

Classification: Certified in accordance with FAA TSO-C23D

Documentation: Related Equipment Paperwork:

2. Description of Container System V1R1-0-01

Type of Container	Main and Reserve Canopy Container EVO
Number, Reserve Container Flaps	6
Reserve Pilot Chute	Spring loaded, Inside
Manufacturer	FIREBIRD USA LLC, ELOY, AZ, USA
Reserve Automatic Activation	Reserve AAD ready
Harness Material	Type 7, Type 8, Type 17
Hardware	Mil-Spec / PIA-Spec

Parts List Harness/Container EVO see page 9

3. Description of RUSH Reserve Parachute R01

Type of Parachute	Ram Air Square Reserve
Number of Cells	7
Construction Technique	I-Beam Chord-Wise
Manufacturer	FIREBIRD USA LLC, AZ, USA
Suspension Line Connectors	Soft Links / Stainless-steel Rapid Links
Canopy Fabric	Nylon F-111
Suspension Lines	EDELRID Dyneema

Parts List Canopy RUSH see page 9

4. System Operating Data

Weight:	ca. 7-15 Kg (15-22 lbs.)
Max Load on Harness/Container:	150 Kg
Max. Load on Canopy:	See Technical Data, page 07
Max. Deployment Speed:	150 KEAS, 277,8 Km/h
Max. Reserve Repack Cycle:	365 Days
Allowable Service Life:	15 Years

Model	Student	Beginner	Intermediate	Expert	Exit weight
	weight max: kg / lbs.	max. (kg / lbs)			
Rush 90	Not recommended	Not recommended	50 / 110	65 / 143	95 / 209
Rush 110	Not recommended	Not recommended	60 / 132	70 / 154	95 / 209
Rush 130	Not recommended	Not recommended	70 / 154	78 / 172	105 / 231
Rush 150	Not recommended	65 / 143	75 / 165	90 / 198	110 / 243
Rush 170	70 / 154	80 / 176	90 / 198	105 / 231	110 / 243
Rush 190	85 / 187	90 / 198	98 / 216	115 / 254	115 / 254
Rush 210	95 / 209	100 / 220	105 / 231	115 / 254	115 / 254
Rush 230	105 / 231	105 / 231	115 / 254	115 / 254	115 / 254
Rush 250	125 / 276	125 / 276	125 / 276	125 / 276	125 / 276
Rush 270	135 / 298	135 / 298	135 / 298	135 / 298	135 / 298
Rush 300	150 / 331	150 / 331	150 / 331	150 / 331	150 / 331

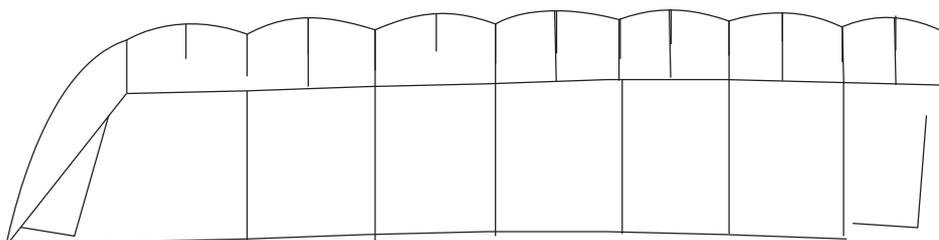
6. Compatibility Chart:

		Canopy Size (Rush):										
		90	110	130	150	170	190	210	230	250	270	300
Container Size (EVO):	XXS	X	X									
	XS	X	X									
	SS*			X	X							
	S			X	X							
	M					X	X	X				
	L						X	X				
	XL							X	X			
	XXL									X	X	X

*Special order

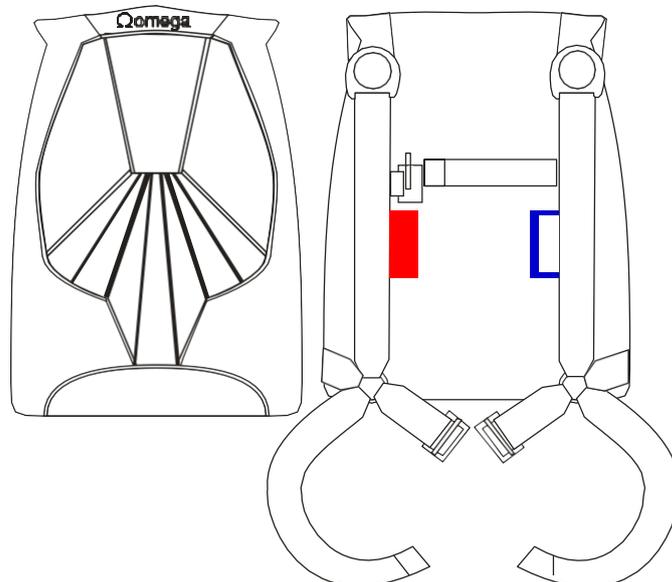
7. Canopy / Parachute

7-cell rectangular parachute of F111 fabric in I-beam/chord-wise construction.



8. Harness and Container

The Harness/Container system is assembled out of mil-spec and or PIA spec materials including type 7, type 8, type 17, as well as Cordura. The container is closed by 2 metal pins for manual deployment of the main and reserve parachutes. The harness has a 3-point closure system with an adjustable chest strap and leg straps. The attachment of the reserve parachute is via the connector links and integrated reserve risers. The main parachute is connected via connector links and the 3-ring riser release system.



9. Parts List:

P/N V1R1 0-01 Container system EVO				
No.	Sub P/N	Title:	Batch:	Remarks:
01	P/N-004	Square Reserve Freebag		
02	P/N-031	Reserve Pilot Chute		
03	P/N-015	3-Ring Release Handle		
04	P/N-011 or 012	Reserve Handle		
05	P/N-050 or 51	Main Risers		
06	P/N-003	Main Deployment Bag		
07	P/N-021 through 026	Main Pilot Chute		
08	P/N-016	RSL line		
09	P/N-032	Reserve safety stow		
10	P/N-027	Pull-out		
P/N R1-Reserve canopy Rush R01				
No.	Sub P/N	Title:	Batch:	Remarks:
01	P/N-008	Canopy		
02	P/N-063	Slider		
03	P/N-070	Soft Links		

10. Maintenance Instructions

Reserve parachutes must be opened, aired, inspected and repacked at the latest every 180 days.

In extremely hot and humid climates, an essentially shorter pack cycle is recommended. The main parachute must be inspected after 120 days or 50 jumps whatever comes first. After 120 days or 50 jumps you should replace all rubber stows. (Packing instructions EVO main container)

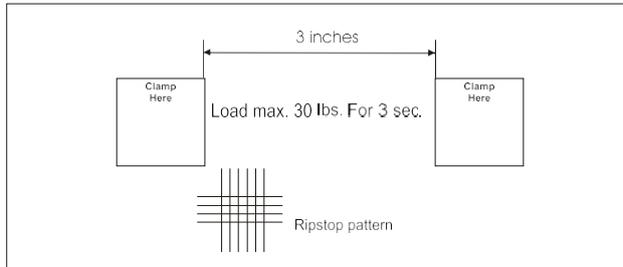
Fabric testing should be done annually (at the appropriate repack cycle). It is not necessary to test a canopy before it is within one year after the date of manufacture. Use commercially available 1 inch (2,54 cm) fabric testing clamps with rubber faced jaws and appropriate scale. The scale should be calibrated once per year and be accurate within 1 lb. (0.4535 kg). The fabric test should be noted in the packing data card for the reserve parachute.

Three fabric pull tests should be performed on a canopy:

- One on the left end cell top surface
- One on the center cell top surface near trailing edge
- One on the right end cell top surface

The test should be at least 3inches (7.62cm) away from any seam or data panel.

The test should be done chord-wise. An additional test must be performed on any stained or discolored areas. Lock the clamps securely avoid slippage. Mark the tested area with parachute ink. Note the passed or failed fabric test in the packing data card.



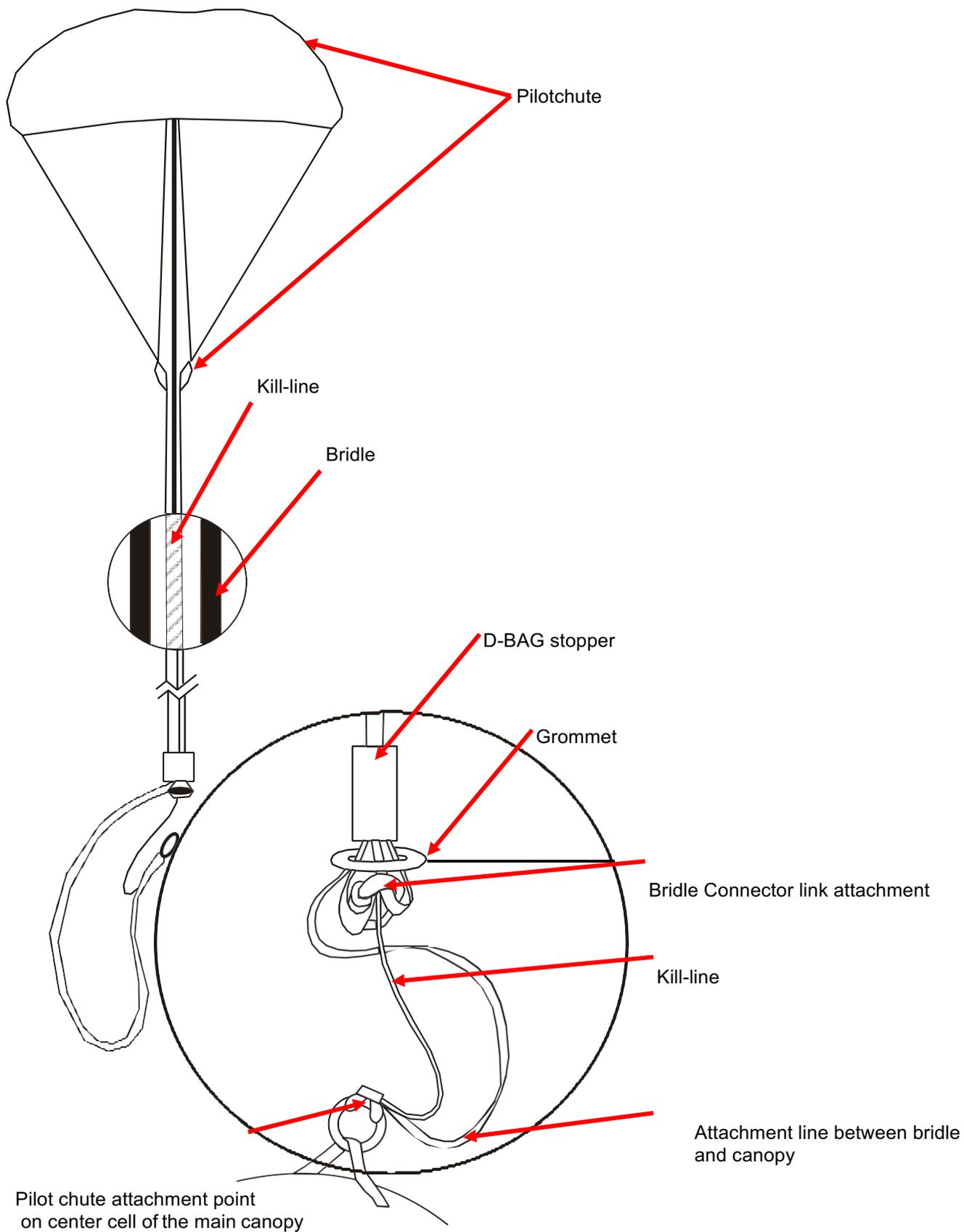
For more details, of what should be maintained and when see:	
Page 15	Release device
Page 15	3-ring system
Page 16	13. Maintenance and Storage
Page 38	Rubber bands

11. Assembly

The parachute system may only be assembled by the manufacturer or an appropriately certified rigger that deems it airworthy.

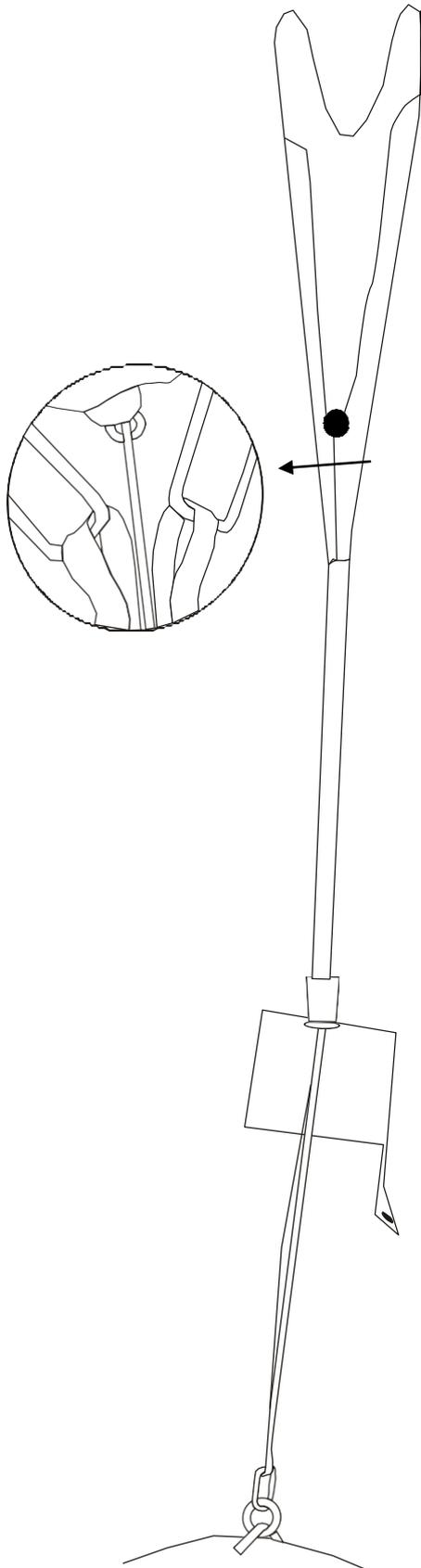
The system must be assembled in accordance with the owner’s manual.

The hand deployment with kill-line:



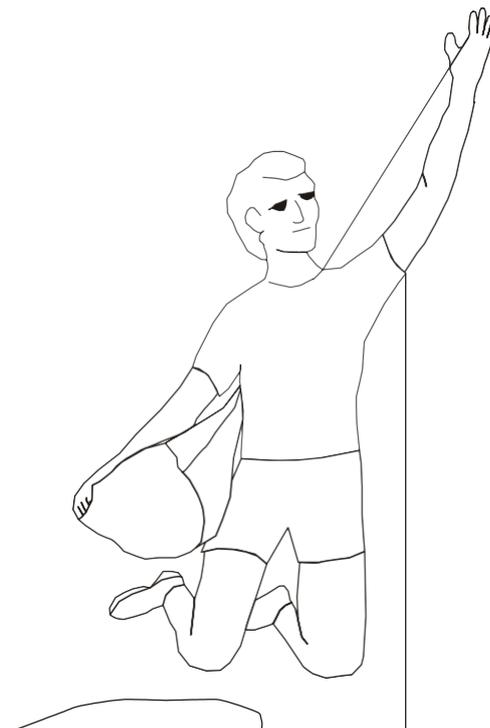
The pilot chute with kill-line:

Cock the pilot chute after each jump before packing the main canopy.

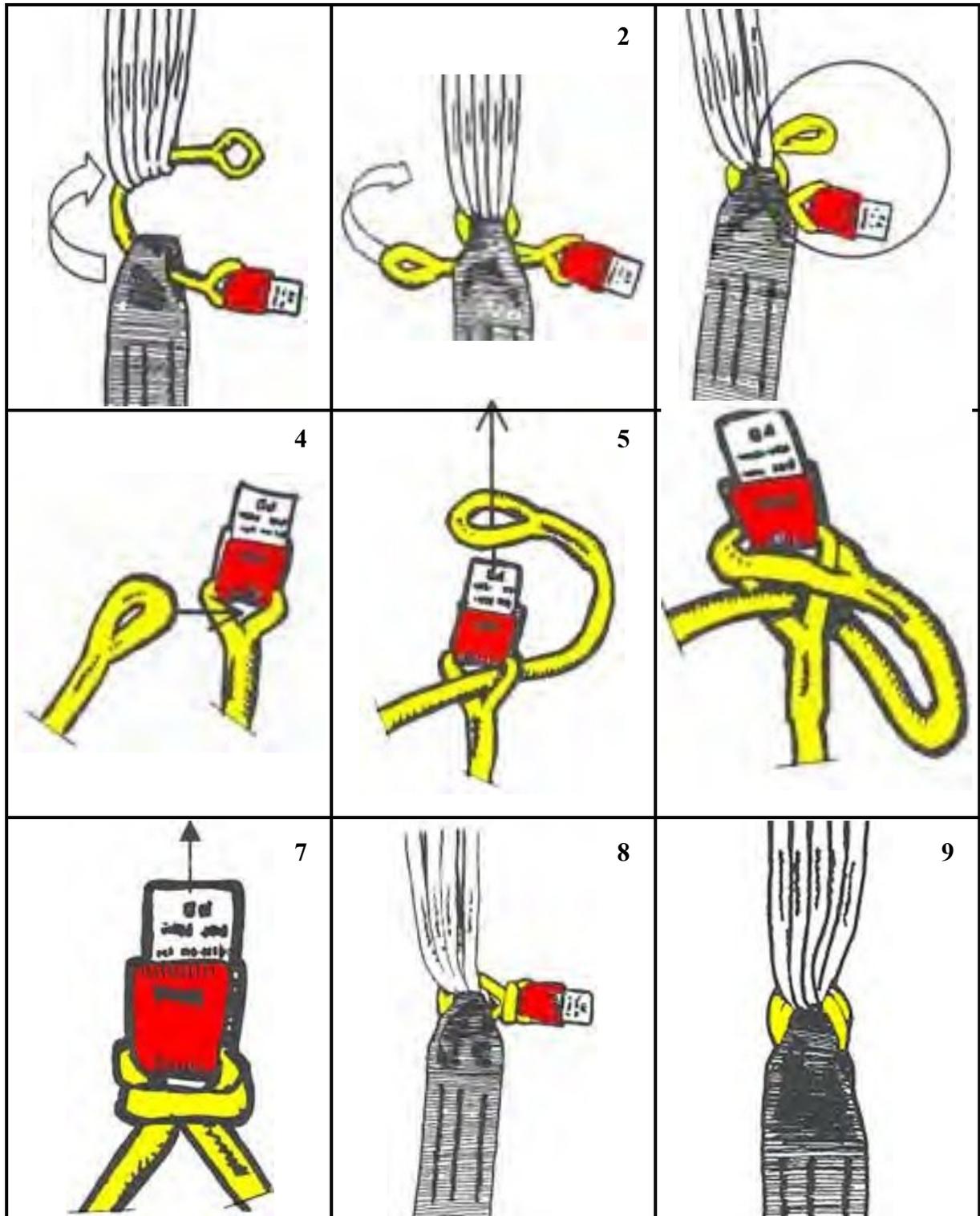


After the main canopy is open, the pilot chute will collapse. The handle at the top surface of the pilot chute is pulled in by the kill-line. It will reduce air drag and enhance canopy performance.

Before packing the main canopy, the pilot chute must be cocked. Grasp the handle and pull the kill-line all the way out. Check the pilot chute after cocking, the colored marking on the kill-line must be seen in the window of the bridle. Check again after you put the main bag in the container.

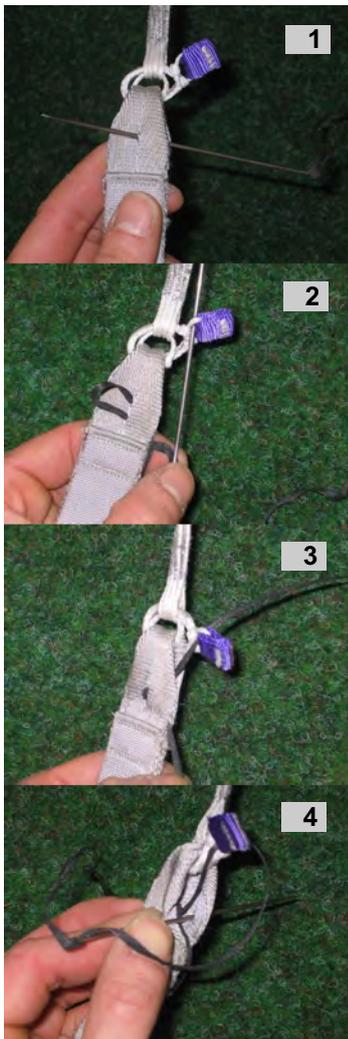
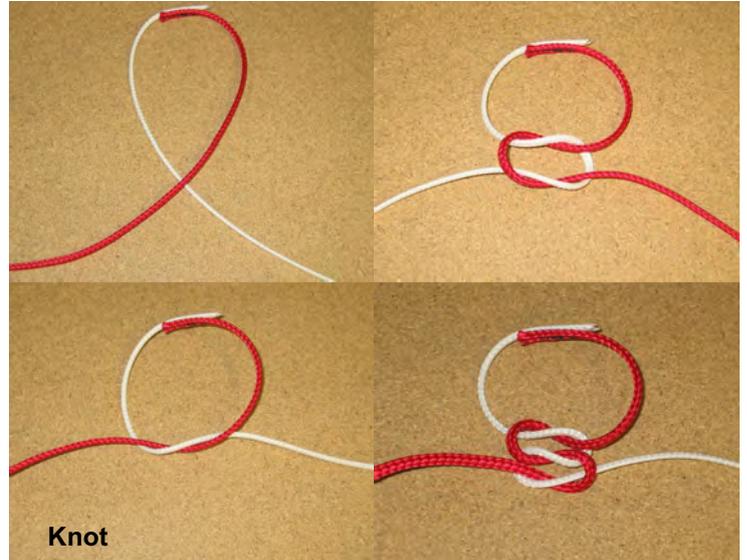


How to mount Soft Links to your canopy:

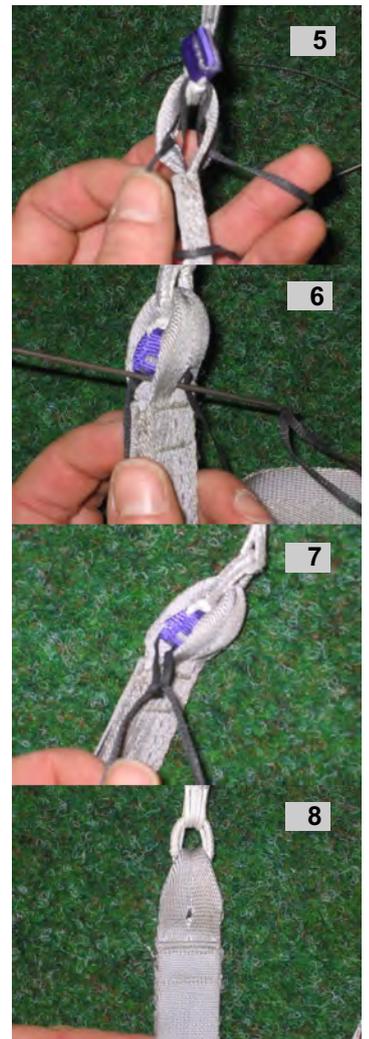


It is important that the soft links will stay in the right position. They should not turn out of the riser (like in picture 8). The red marked stopper must remain inside the riser. If the stopper is out of the riser, it is possible to catch a line. This can cause a malfunction on the main canopy. To avoid this, it is possible to secure the soft links to the riser. (Use Supertack 80-90 lbs. MIL-T-43435 or 50 lbs. MIL-T-43435) .

How to use Supertack to secure soft links:



Secure a soft link:
Use Supertack and needle to secure the tab inside the riser fold. Secure Supertack with surgeons knot.



12. Periodic Inspection Instructions

The main parachute and container system should be thoroughly inspected every 50 jumps or every 120 days after assembly, whichever comes first.

This inspection is considerably more detailed than the inspection that is to be carried out each time the parachute is packed.

Every 180 days the reserve parachute must be opened, aired and thoroughly inspected before it is repacked by an appropriately certified rigger or equivalent specialist.

The inspection can be carried out according to the following directions.

The container should be inspected in a place that is clean, dry, well lighted and large enough that the parachute can be completely laid out.

The following inspection sequence is systematic and meaningful:

1. Pilot Chute, Bridle and D-Bag

Check the pilot chute and bridle for proper attachment on the top surface of the canopy, as well as for damage. The parachute fabric and the reinforcement tapes, as well as their stitching, should not be damaged. Check the functioning of the pilot chute kill-line. The grommets on the d-bag, including the grommet on the bottom of the d-bag, should be undamaged, without sharp edges and firmly attached to the bag material. Replace old stowing rubber bands as necessary.

2. Main Risers

The Main risers should not show damage on the material or on the grommets of rings. Check the functionality of the toggle attachments.

3. 3-Ring System

The 3-ring system must be perfect, the rings must be round and undamaged. The closing loop must show no damage. The 3-ring system must open with the lightest pull, as soon as the cable is removed. The riser gets hard after a couple of jumps and may not release the 3-ring system. Twist the main riser with the 3-ring system after 120 days to keep the strap in a flexible state.

4. Cutaway and Reserve assemblies

The release handle (cutaway) should be checked that the cables move freely in the housings. The cables should be cleaned completely after 120 days. Use a clean paper towel with silicone oil. Wipe the cables 3-4 times so that all black areas are cleaned. Check that the yellow coating is free of damage. There should be a light oil film (Not too much otherwise the oil collects the dirt and the cables get sticky). The Velcro fastening must be perfect and attached well. The reserve ripcord cable must also be cleaned (without oil) and move freely in the housing.

5. Harness, Hardware and Stitching

An inspection of the harness, hardware and the stitching can only be carried out visually. Pay attention that the yellow signature thread running along the outside of the type-7 webbing is not damaged and that the stitching is not broken. All metal parts must be free of corrosion and should move freely as designed.

6. Container

Examine the container for possible tears, rips or fabric separation. The grommets should not show sharp edges or evidence that the fabric is torn away. The loop must be in perfect condition. It is preferable to replace the loop too early rather than too late.

You should contact a certified rigger in case any abnormalities are found.

When in doubt—safety first!

13. Maintenance and Storage

The system should always be kept dry (45-70% relative humidity) and cool (10-15° Celsius, 50-60° Fahrenheit), in a container through which light will not pass. UV light can cause invisible damage to the fabric through the deterioration of the nylon fibers. The parachute canopy and container should be kept away from all types of corrosive substances such as lye, acids, fuels, varnishes and solvents. Also, storage in areas with running electrical motors (O³ - Ozone forming) should be avoided. Parachute canopies should be opened no later than 6 months after being packed, to air-out, check and re-pack. In extremely hot and humid climates, a shorter pack cycle is recommended.

14. Cleaning

The container should only be cleaned with fresh water. The use of brushes or rough sponges should be avoided.

After contact with salt water, the container should be rinsed with fresh water at least three times within the first 24 hours.

The removal of oil, tar or similar substances should be discussed with the manufacturer.

The equipment should not be cleaned in a washing machine.

Only air dry the container by hanging it in the shade.

After cleaning the container should be re-inspected.

15. Alterations and Replacement

Should repairs be necessary, they shall be performed by the manufacturer.

Alterations or modifications may only be carried out by the manufacturer or a manufacturer approved Master Rigger. Only official replacement parts or those approved by the manufacturer may be used.

How to order new spare parts see page 77!

Inspect each time before the parachute is packed

The parachute system should be inspected according to the manufacturer's instructions. Stretch the harness-container and the main canopy out on the ground so that the suspension lines are pulled straight. Check that the lines are straight, untangled, and that the slider is not damaged.

16. Periodic Inspection Instructions, Parachute

The following inspection sequence is systematic and meaningful:

1. Canopy Top Surface

Spread the canopy out completely. Pay attention to all stitching, possible tears, burns and rips or fabric separation.

2. Canopy Bottom Surface

Turn the canopy over and check it in the same way in which the top surface was inspected. Pay special attention to the suspension-line attachments.

3. Canopy Ribs

Each rib should be examined from nose to tail. This involves looking carefully and thoroughly in each cell. Give special attention to the reinforcement tapes, the suspension-line attachment points and the bridle (to the pilot chute) attachment points. Also check whether the cross-ports are frayed.

4. Canopy Exterior

Lay the canopy out on the side so that the cells lay on top of each other. Inspect the condition of the stabilizers and slider stops.

5. Suspension Lines

Inspect the entire length of the lines for damage. Pay special attention to the cascades and where each line attaches to the connector link. Check whether the connector links are tightly fastened and whether Soft-Links show any sign of damage.

6. Slider

The slider should be inspected for damage to the fabric, the reinforcement tapes and the stitching. The grommets should not have any sharp edges and should be securely attached to the slider.

7. Steering Lines

Check that the steering lines run proper through the slider and through the small guide ring of the main risers. Make sure steering lines are correctly attached to the steering toggle. The steering lines should not be twisted.

17. Packing the Parachute

Packing Instructions

The Main parachute must be packed within 180 days of use. The appropriate personnel who is approved to pack the main parachute is either a certified parachute rigger, the person using the equipment for the parachute jump, or someone under the direct supervision of a certified rigger. It is recommended that the parachute be packed in a cool and clean environment with minimal UV light. Packing the parachute on abrasive surfaces in direct sunlight are not recommended.

Note: Reserve parachutes may only be packed by certified riggers

Before beginning the packing process, the packer should make sure that the parachute:

1. Is in airworthy condition.
2. Is not due for a re-inspection.

Should there be questions or uncertainty, get in direct contact with the manufacturer.

Pack the parachutes in accordance with the manufactures instructions.

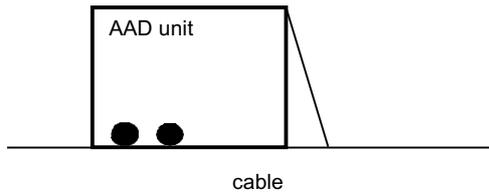
In order to be able to pack the reserve, as a prerequisite, the packer must be familiar with the basic concepts of the pro-packing method.

The following aids are absolutely necessary to pack or at least very highly recommended: Wooden packing paddle, packing plate, temporary packing pin with warning flag, AAD loop material, pull-up cord, locking pull-up cord for freebag, Velcro protecting strips and packing data card.

The harness-container and the parachute are laid out so that the reserve flaps of the container are facing up. It is advisable to weight down the container so that it doesn't slide easily during packing. The following preparatory work should be carried out: Set the brakes. Fasten the connector links together with a pull-up cord. Inspect the AAD (automatic activation device) for possible servicing or battery change. Check the reserve container for dirt or damage. Prepare a new loop of the right material (Check user's manual of the AAD for the right material. And 20% shorter than the old loop, since the new loop material stretches).

18. Installation of an Automatic Activation Device (AAD)

The AAD battery can be easily pushed into the pouch inside the reserve container.



The cutter must be inside guiding fabric tape.

Continue routing through elastic cutter attachment.

Guide the control unit through the channel.

Place the control unit of the AAD inside the pocket with the window in the back pad.



The excess cables should be stowed neatly in the Velcro retainer.

Route the control unit cable through of cable pocket.

Routing the cutter cable out of the cable pocket.

No extra length of the cables should be outside the pocket

The curve of the vigil 2 battery should face inwards toward the reserve container as shown.



The main pin cover has a built-in safety feature. In the event of an entanglement, the pin cover flap will release.

To avoid premature loss of flap do not remove the flap unless it is an emergency.

Excessive removal and installation will cause wear on pin cover.
See page 47 for more details



19. Pre-Inspection Before Each Packing of the Parachute

The parachute system should be inspected according to the manufacturer's instructions. Stretch out the harness-container and the parachute canopy so that the lines are pulled tight. Check that the lines run straight and the slider is not damaged.

**Should something unusual turn up during inspection, a certified person should definitely be contacted for a more thoroughly assessment.
When in doubt—safety first!**

20. Packing Procedures: Rush Reserve Parachute

We would like to illustrate the packing method with the following pictures:

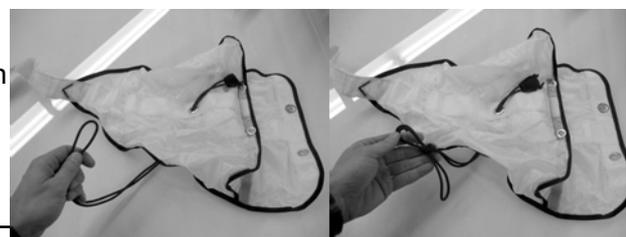
Set the brakes by pulling the 'eye' of the line through the Guide ring and securing with the tip of the toggle. Stow The excess line making sure it doesn't make contact with The Velcro



Secure risers together to maintain symmetry



Prepare the freebag by utilizing a Locking cord and Velcro protector strips on The line-stow pocket



20. Packing Procedures, Rush Reserve Parachute

Flake the Nose cells



Flake the material between the 'A' and 'B' Lines



Flake the material between the 'B' and 'C' Lines



20. Packing Procedures, Rush Reserve Parachute

Flake the material between the 'C' and 'D' Lines



Lay parachute down and recheck nose cells



Stack the A/B folds on top of the nose cells



Stack the B/C folds on top of the A/B folds



20. Packing Procedures, Rush Reserve Parachute

Continue stacking the C/D folds on top of previous folds. Repeat steps for other side

Flake tail seams symmetrically on top of the pack job. Make sure the lines are in the center and the material is to the outside of the pack job. Stabilizers must be pulled to the outside of the pack job. Quarter slider between slider stops.

Perform small S fold

Reduce the width of the packjob to same size as freebag.

Squeeze the air out by making tight crisp folds.



20. Packing Procedures, Rush Reserve Parachute

Check width of packjob with the width of freebag



Make larger S fold so that it stacks on top of smaller S fold



Maintain symmetry of packjob by keeping control of the material through the folding process



Separate the pack job by finding the center cell



Form the 'ears' of the packjob



20. Packing Procedures, Rush Reserve Parachute

Each ear is to be placed in the freebag to distribute the bulk evenly throughout the entire bag



Continue placing the entire parachute in the bag



Maintain symmetry while filling the freebag with the packjob



Close the mouth of the bag by performing 2 locking stows. The bite of line should be 2" in length



20. Packing Procedures, Rush Reserve Parachute

S fold the lines in the pocket making sure they do not make contact with the Velcro. Leave 5-6 inches of excess line between the bag and the risers



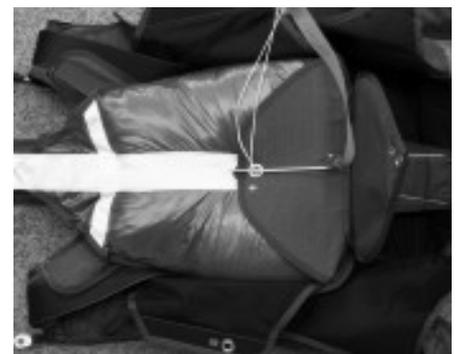
The reserve risers need to be contoured around the shoulder strap. Distribute the bulk of the risers by separating them in the pack tray.



Fill the container evenly with the freebag. Pull-up cord is routed through the center of bag



Close flap #1 Route pullup cord through cutter. (Cutter location is on flap #1 or flap #3)



20. Packing Procedures, Rush Reserve Parachute

Fold the bridle attachment point triangle under the freebag



S Fold the bridle across the top of the bag in 5-6" Folds leaving 6ft of bridle to pilot chute.



Close flap #2 with reserve bridle exiting out the bottom



Make folds in a 'V' pattern with the point of the 'V' towards the top center.



20. Packing Procedures, Rush Reserve Parachute

Route the pull-up cord through the reserve pilot chutes center. Compress spring while guiding all material to the outside.



Roll the pilot chute material around the parameter of the spring. Place rolled material on top of bag. Close flap #3. Cutter location is on flap #1 or flap #3



Close flap number #4 as shown



Close flap #5 as shown

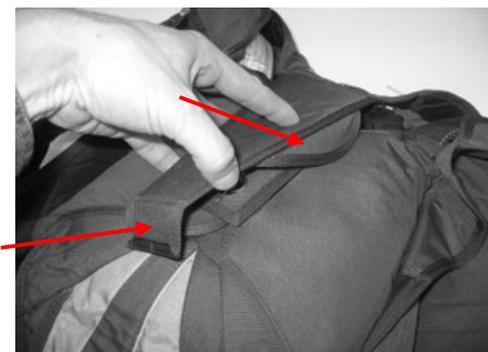


20. Packing Procedures, Rush Reserve Parachute

Close flap #6. Secure with reserve pin. Make sure the RSL is active.



Seal pack job in accordance with the parachute riggers handbook. Close reserve pin cover flap.



23. Reserve Static Line (RSL)

The Reserve static line is made up of 3 parts, The shackle, the lanyard and the guide ring.

Stow the excess lanyard as shown.

Make sure the Velcro is secured on the correct location.

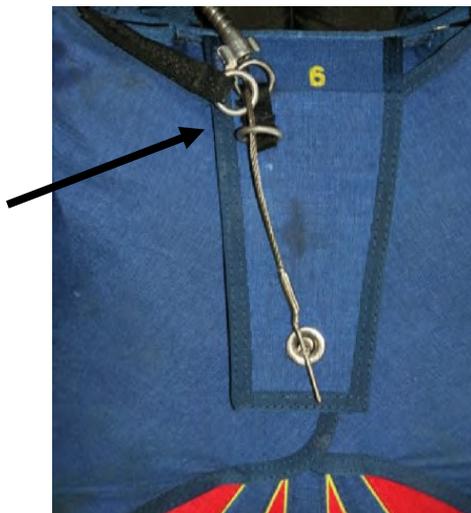
It's important that the velcro does not contact the webbing.

The shackle is secured to the ring on the riser.

The guide ring is placed in the middle of the rings on flap #6

With the reserve ripcord through all 3 rings.

The lanyard must be checked to allow function.



The shackle is secured to the ring on the riser.

21. Packing Instructions for the EVO Main Container

Because there is no restriction on the use of a main parachute in the EVO container system, we are only describing the closing of the main container. Please refer to the manufacturer's manual for the packing instructions for the main canopy.

Even if you follow all instructions and you packed all parachutes well it is possible that parachutes will not open properly! If you follow all instructions you minimize the risk for a malfunction!

Training and experience is required to use this equipment!

You should follow the inspection instructions in this manual for inspections of the parachute system. The parachute should be packed only in shady areas on a clean, flat, dry ground. Use a packing mat to protect your equipment while packing. The complete system must be inspected after 120 days or 50 jumps. Before each packing of the main parachute you must be sure that it is still in well condition.

All maintenance like assembling, change of parts or packing the reserve, should only be done by a certified rigger. Use only original parts from the manufacture.

21. Packing Instructions for the EVO Main Container

Inspection of the 3ring release system.
No damage on the rings or the loop.
Routing of the loop and the yellow cable.

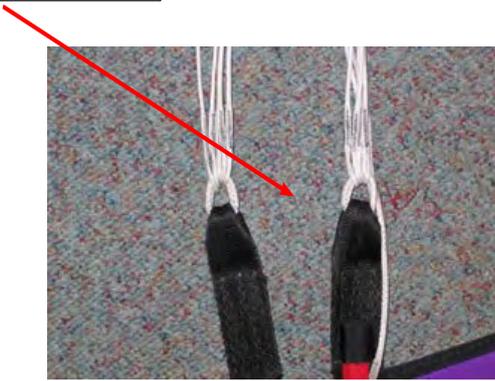


Lay down the container on a mat.
Fix the container to the mat.



Check the soft links:
They must stay inside the riser!

Correct



21. Packing Instructions for the EVO Main Container

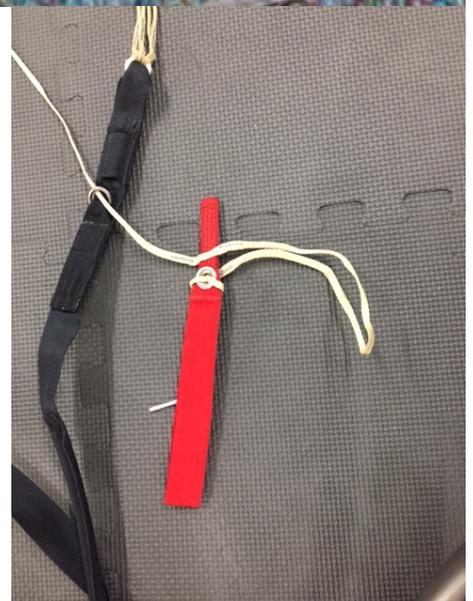
Connector link:

Size 4 stainless steel, 280 Kg with soft stopper.
Check if they are tightened well.



Set the brakes:

The steering lines should have no twists.
Put the toggle through the brake attachment point on
the steering line.



Put the tip of the toggle in the keeper on the riser.



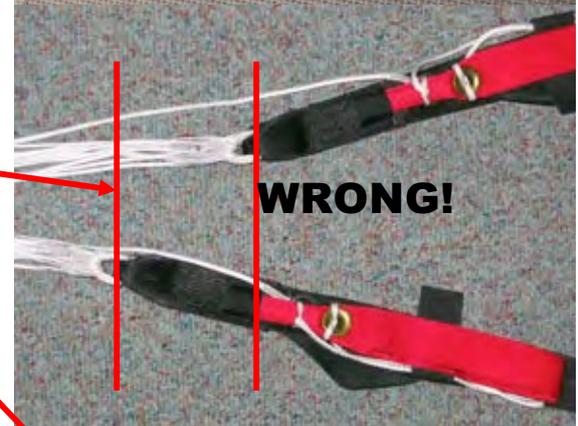
Stow the excess steering line in the keeper on the
backside of rear riser.

21. Packing Instructions for the EVO Main Container

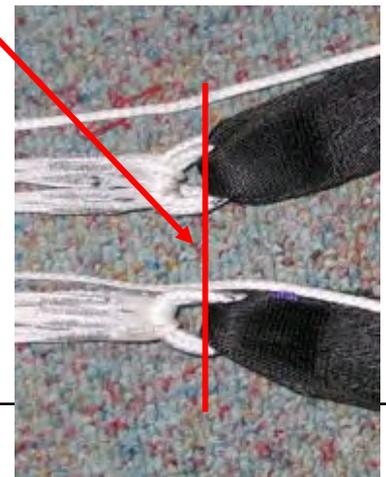
Secure the toggle on the riser by either Velcro or locking pin.

Check

Line symmetry:
The risers should be symmetrical while packing.



Correct



21. Packing Instructions for the EVO Main Container

Collapsible Slider:

It is important to un-collapse the slider before packing.

Feed the line tab on the slider back into the channel.

Slider with Kill-line:

Spread the slider out to its full size.

Pick up the lines:

Check line continuity



21. Packing Instructions for the EVO Main Container

Line check:

The lines must be straight. Check for wear and replace



Line check:

The lines should have no twists.



Start folding the canopy:

Please follow the instructions of the main canopy manufacturer.



21. Packing Instructions for the EVO Main Container

How to pack the main canopy:

Flake the cells making sure the lines a straight and even. Quarter the slider between the slider stops

Lay down the packed canopy:

Wrap the tail around the parachute



Check your Pilot chute

Cock the pilot chute and bridle. Make sure the pilot chute can catch air. Check the kill-line window for mark.



21. Packing Instructions for the EVO Main Container

Bridle attachment:

Check bag/ bridle attachment point.



Rubber stows:

We recommend only standard MIL Spec rubber stows:

Small size: 1 1/4 x 3/8 inch, (Spectra <= 725)

Big size: 1 1/2 x 3/8 inch, (Spectra > 725, Dacron)

If you have a main canopy only with Dacron lines use only the bigger size rubber stows.

After 120 days or 50 jumps you should replace all rubber-bands.



21. Packing Instructions for the EVO Main Container

Folding the canopy:

Remove air by compressing parachute the width of the bag.



Folding the canopy:

Make S folds. Keep control of the material.



Folding the canopy:

Push the folded canopy into the main bag.



Close the mouth of the bag by doing locking stows.

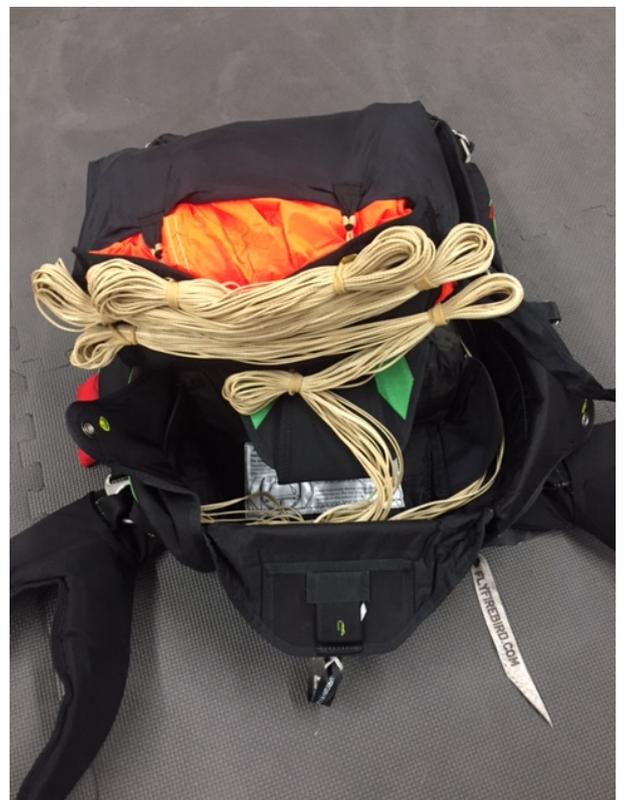
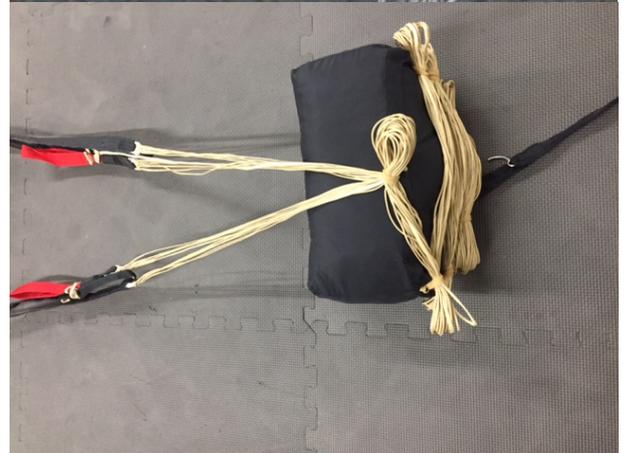


21. Packing Instructions for the EVO Main Container

The line stows should be 2 inches in length

Leave maximum 1-2 feet of excess line
USE CENTER STOW

Contour the risers around the shoulder of the harness and down the sides of the reserve container making sure there are no twists



STANDARD BRIDLE ROUTING
With the closing loop and pull-up cord secured to the bottom flap. Close the top flap.

Route the bridle to the top right of the container.

Close the side flap



Close the opposite side flap and secure with pin.



Tuck excess bridle under side flap.



21. Packing Instructions for the EVO Main Container

ALTERNATIVE BRIDLE ROUTING

Rotate the bag so the bridle attachment point is towards the reserve container.

Be sure to fill the entire pack tray with the bag.

Route the bridle towards the lower right



With the closing loop and pull-up cord secured to the bottom flap. Close the top flap.



21. Packing Instructions for the EVO Main Container

Close the side flap



Close the opposite side flap
and secure with pin.



21. Packing Instructions for the EVO Main Container

Tuck bridle underneath side flap



Close main pin cover flap



The new main flap offers maximum pin protection throughout all styles of flying maneuvers.

The new TearOff Flap System.

This system prevents emergencies by simply tearing off the flap in case of a line entanglement. Also, you can easily replace it in case of damage or wear.



Close riser covers

Folding the pilot chute:

Lay upside down so mesh faces up

Then fold it in half.



21. Packing Instructions for the EVO Main Container

S Fold the Bridle



Roll material with handle exposed.



Make the folded pilot chute same dimensions as BOC Spandex pocket

21. Packing Instructions for the EVO Main Container

Push it into the BOC pouch.



When it is all inside the pouch only the PC handle remains outside.



When the packjob is done you should check your gear! In this visible overview you check for loose handles, open flaps, unstowed bridle, dirt or other unusual things.



22. Pullout - Main parachute opening system

S-fold the bridle on top of the deployment bag



Compress the pilot chute material



Place pilot chute under #1 flap. The pin and handle will exit the right side



22. Pullout - Main parachute opening system

Close the container normally

Secure the handle with Velcro.

Make sure the pin and lanyard have no twists



22. Pullout - Main parachute opening system

Close the side flaps



Secure with main closing pin



Tuck pin lanyard underneath the side flap.



24. Options: Student Rig

Spare parts, optional equipment. Only use original parts from the manufacture.

Firebird spring loaded pilot chute



Student ripcord.



RSL line with connector.



Main canopy packing tube for static line use.



Second release handle AFF.

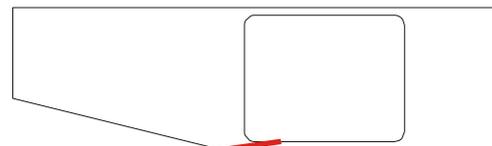
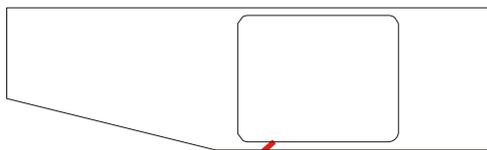


24. Options Student Rig

Static line.

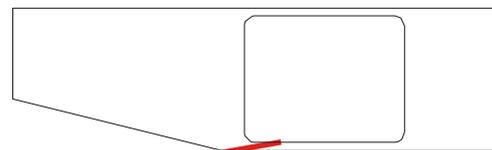
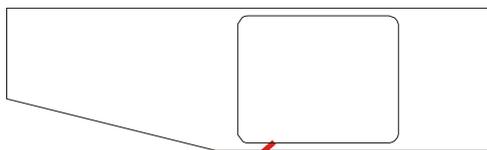


Velcro attachment for static line with pilot chute assistance.



On static line jumps with pilot chute assistance only the static line remains to the aircraft. Less wear on the equipment.

The assembly should only be done by a certified rigger.



On static line jumps with direct bag systems the static line and the bag remains to the aircraft. More wear on the equipment. And more difficult to change from static line operated to manually operated.

The assembly should only be done by a certified rigger.

24. Options Student Rig



AAD window in the yoke:



Check window for the reserve pin:



Typ 8 main riser:



RSL:



2 release handle AFF:

Adjustable hip ring:



25. Packing the student main canopy

Follow instruction how to pack the main parachute with spring loaded pilot chute.

S fold the bridle on top of the deployment bag



Compress the spring of the pilot chute



The material of the pilot chute is compress between the springs.

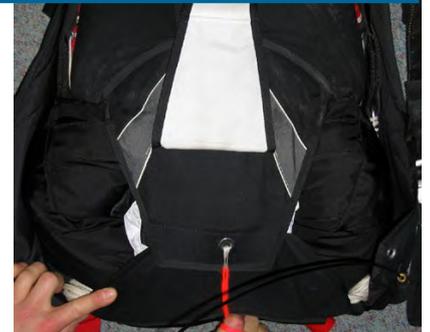


Completely compress the spring



25. Packing the student main canopy

Close flap 1 and 2.



Close flap 3



Close flap 4



Close the container with the student ripcord.
Remove the pull up cord.



25. Packing the student main canopy

Mate the Velcro for the pilot chute assist system



Tuck the pilot chute assist underneath the side flap.

Secure the static line on the main container via rubber bands. Secure the shackle.



25. Packing the student main canopy

Use of a packing tube for the student main canopy.
Pull the tube over the packed main.

Important! Attachment of the static line to the main canopy. Secure the static line with a rubber band.



Secure the static line with a rubber band.

Close the velcro fastener.

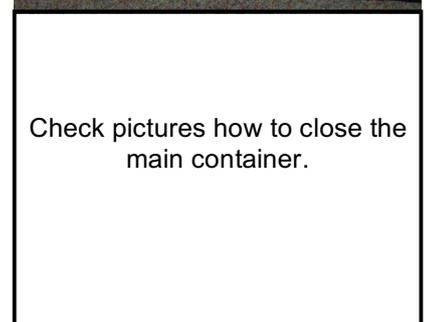
25. Packing the student main canopy

To close the tube perform an S-fold inwards the tube on top of the main canopy.

Close the tube with the rubber bands.

Follow the instruction how to close the EVO main container.

Static line without metal pin. Protects the aircraft to avoid damages to the tail. Use only with elastic main loop.



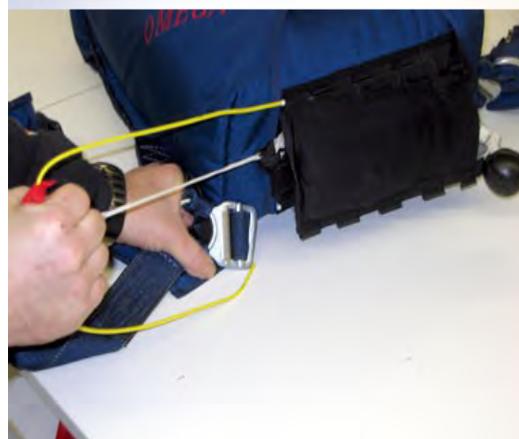
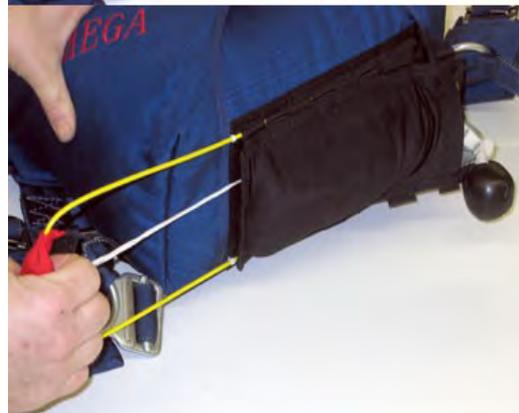
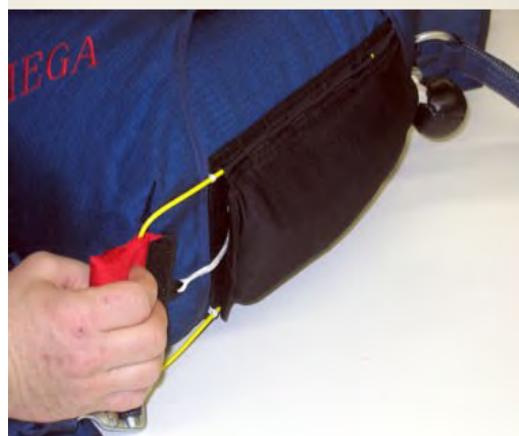
26. Main override device (MOD)

To use normal hand deploy for Accelerated Free Fall Program (AFF)

Bottom of container mounted hand deploy with MOD for AFF. To understand how it works, follow the pictures.

Pull handle and yellow release cables.

Continue pulling the handle and cables to release the BOC spandex pocket.



26. Main override device (MOD)

Continue pulling as you extract the secondary pilotchute



The secondary pilotchute will extract the main pilotchute.



26. Main override device (MOD)



The main pilotchute will operate normally.



The MOD is not attached to the main canopy. This avoids that it could be caught up from the student or parts of his equipment. After it was activated it drops down on the ground.



27. Mounting the Main override device MOD

The Mod should be checked and repacked every 120 days.

Place the MOD pouch parallel to the bottom of the container. The bridle must face to the left.

Start with the left part of the yellow cable in the white small loop at the bottom of the container. The loops must be closed in manner of a zipper.

Close the corner with the white loop first.



27. Mounting the Main override device MOD

The cable gets routed around the BOC spandex pocket.



Attach the handle via velcro.

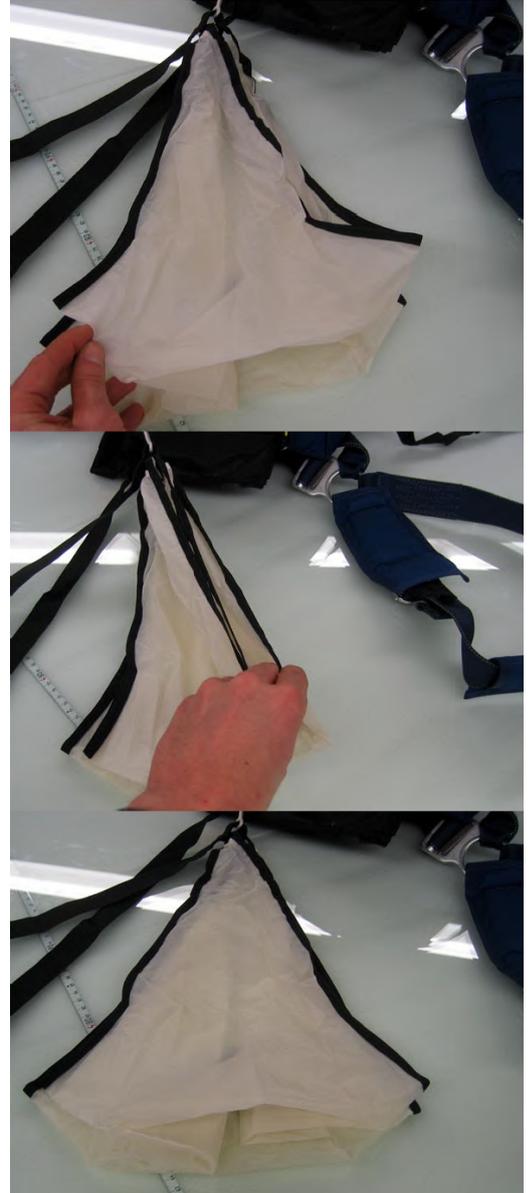


Pack the secondary pilot chute via a series of triangular folds.



27. Mounting the Main override device MOD

Continue folding to reduce the size so that the Secondary pilot chute fits in its pocket.



27. Mounting the Main override device MOD

The secondary pilot chute is packed very tightly to Reduce the volume while it is in the pocket.



27. Mounting the Main override device MOD

Fold the bridle in S-folds on top of the pilot chute.

Place secondary pilot chute and bridle in the pocket

Make sure white lanyard is not in contact with velcro.

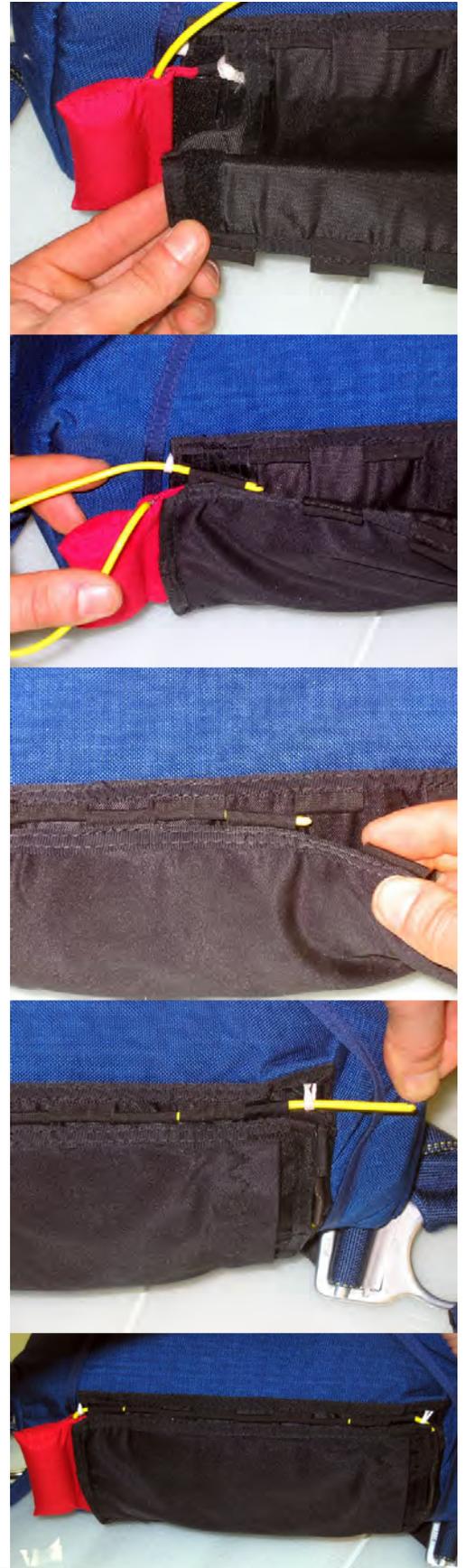


27. Mounting the Main override device MOD

Close the Velcro fastener of the pouch to the pillow.

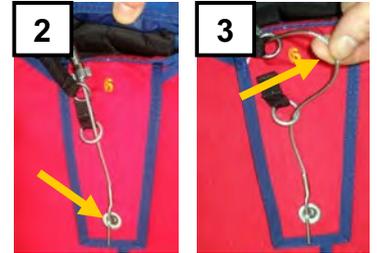
Start closing the top of the pouch with the right part of the yellow cable in the same way like the bottom.

A view of the yellow cable in the top ends as well as in the wider loop on the right side of the pouch.



28. Prejump inspection before each jump

1. Check the reserve data card once a day if the pack job is still valid.
2. The reserve pin and its position.
3. The free routing of the reserve ripcord.
4. The main container closing pin and the pilot chute kill-line.
5. The pilot chute in the pouch at the bottom of the container.
6. Check tuck tabs on shoulders, main and reserve pin covers.
7. The AAD is switched on.



28. Pre-jump inspection before each jump

8. The function of the RS.



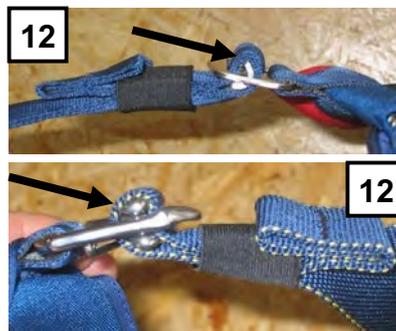
9. The routing and the Velcro attachment of the RSL lanyard.



10. The cut-away handle.



11. The reserve handle.



12. The routing of the chest strap, leg straps and adjustability of the main lift.

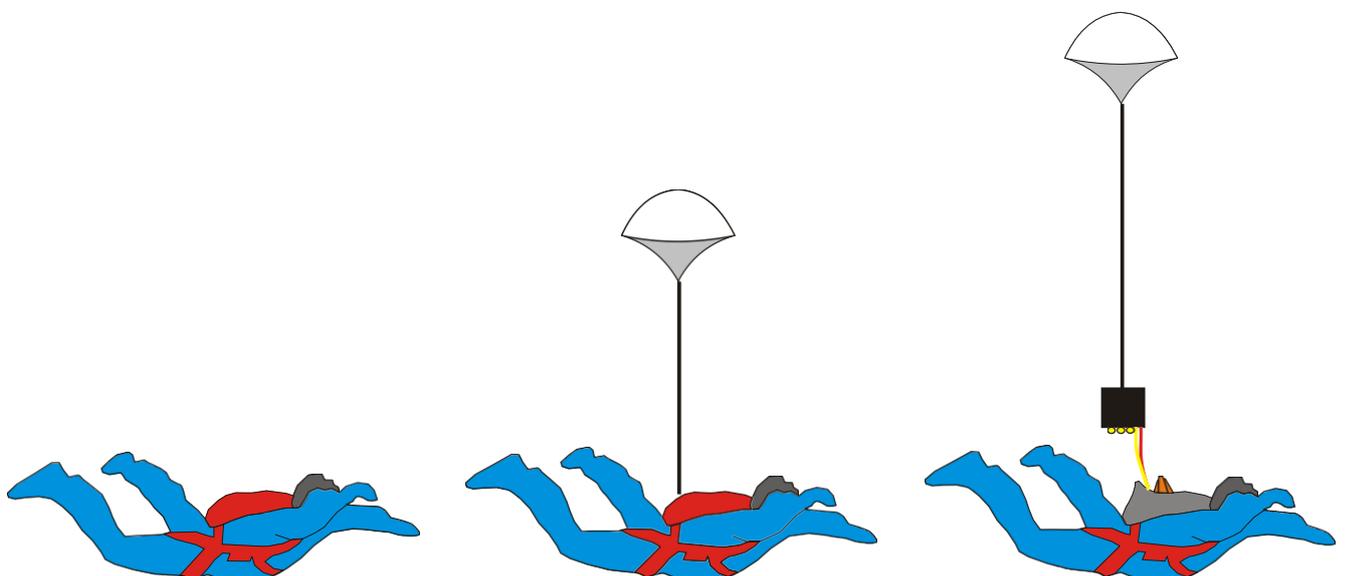
29. Putting on the Parachute

The user puts the rig on over his shoulders like a backpack. The leg straps are brought up between the legs and the ends are fed through the buckles. The chest strap is also fastened with a buckle onto the main lift web. The leg and chest straps should be pulled tight, so that the parachute fits the body snugly but without restricting movement. If the fit is too tight, the rig hinders the wearer; a fit that is too loose can lead to the uneven weight distribution on opening and possibly injury or endangerment of the jumper.

30. Manual Activation of the Main Parachute

We recommend instruction on how to use this parachute system is given by the manufacturer.

The pilot chute must be pulled out of the pouch and released into the airflow. The pilot chute lifts upwards and stretches the bridle. The bridle will pull the curved pin. Then the d-bag inside the container will be lifted out, the lines will stretch and the canopy opens. To open a parachute you must be in a stable position at an adequate altitude. During the opening, the jumper must remain in a stable body position. See pictures below.



31. Manual Activation of the Reserve Parachute

After separation from the main canopy, the parachutist should pull the reserve ripcord handle from the pocket on the left vertical main lift web with an even, strong pull. The steel cable attached to the ripcord handle will be pulled out of the housing and the pin at the end will slide out of the closing loop. At this point the reserve flaps of the rig will open to free the spring-loaded pilot chute. It reaches the air stream and with the attached bridle and then pulls the freebag out. The suspension lines come out of the line pouch, straighten out and, with the last two stows of the “running loops,” free the reserve parachute. The parachute stretches out of the freebag and inflates, during which the slider slides downward and comes to rest on the connector links.

32. Allowable Service Life

On the condition that the parachute is in accordance with the regulations and has been handled corresponding to the instructions contained in this Equipment Handbook, the allowable service life is 15 years and can be periodically be extended by the manufacturer

33. How to order spare parts:

Please send an informal order to:

By mail:

FIREBIRD USA LLC, 409 N Main St, ELOY, AZ, 85131 USA

Or by email:

usa@flyfirebird.com

Describe your spare parts with the parts list shown on page 9.

We are available at your convenience
to answer questions and provide further information at:



409 N. MAIN ST
ELOY AZ 85131
USA

Telephone +1 520 350 7333
Fax +1 520 466 1199

E-mail: usa@flyfirebird.com
Internet Address: www.flyfirebird.com
