

AIR-POL[®] Sp. z o. o.

Członek Krajowej Rady Lotnictwa

Członek Parachute Industry Association

Członek Stowarzyszenia Producentów Polskiego Przemysłu Lotniczego

Feniks STUDENT

Harness/Container System Instruction Manual

model: 101



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WARNING

AIR-POL has done anything and everything possible to apply the highest quality and safety standards in manufacturing the parachute you purchased. Parachute components manufactured with the use of top-quality materials conform to all requirements for equipment to be used with the purpose as intended in the industry. The testing process of our parachutes has confirmed all our technical solution choices as correct. Nonetheless, AIR-POL cannot exclude the risk of damage to or malfunction of the parachute in case of highly unfavourable circumstances coinciding, such circumstances remaining beyond AIR-POL's competencies or responsibility.

In order to minimise that risk:

- Always check whether all parachute system parts have been assembled and packed in conformity to this Instruction Manual,
- Always store and use your parachute in conformity to this Instruction Manual,
- Always follow national parachute safety rules.

AIR-POL provides warranty – valid for a period of 24 months as of the date of purchase – for all parachute components. Should you notice any anomalies or threat to the functionality of your system, the parachute ought to be analysed by an expert recommended by an authorised dealership.

Congratulations on your purchase. We wish you joy and success in using your new system.

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SECTION I

TECHNICAL SPECIFICATION

1. INTENDED PURPOSE

The purpose of the Feniks STUDENT system, recognised as the basic version for the entire series, is its use in parachuting/skydiving training designed for beginners as well as for skydivers planning to improve their skills. It is perfect for entry-level training, for skydiving sport (relative work formation skydiving), and for specialist training. Once the main and reserve canopy sizes are selected correctly, it can be an ideal choice for students as well as AFF instructors. The container's design ensures maximum comfort for parachutists/skydivers remaining in standby for extended periods of time. Technical solutions applied make the system perfect for safe movement on board an aircraft (instructors) without risk of accidental canopy deployment. Feniks can be used by anyone in the business of skydiving/parachuting training – it is an ideal choice for any onboard instructor.

The entirely back-mounted Feniks system consists of a reserve parachute container, a main parachute container, and a container-integrated harness for a single parachutist/skydiver.

The main parachute container has been adapted for static line deployment, with the canopy bag attached to the static line, as well as for collapsible pilot chute hand deployment, with the pilot chute placed in an external bottom-of-container pouch. In case of main parachute malfunction, the parachutist/skydiver can disconnect it from the harness with the use of a three-ring release system, with the cutaway handle placed under the chest strap on the right main harness strap.

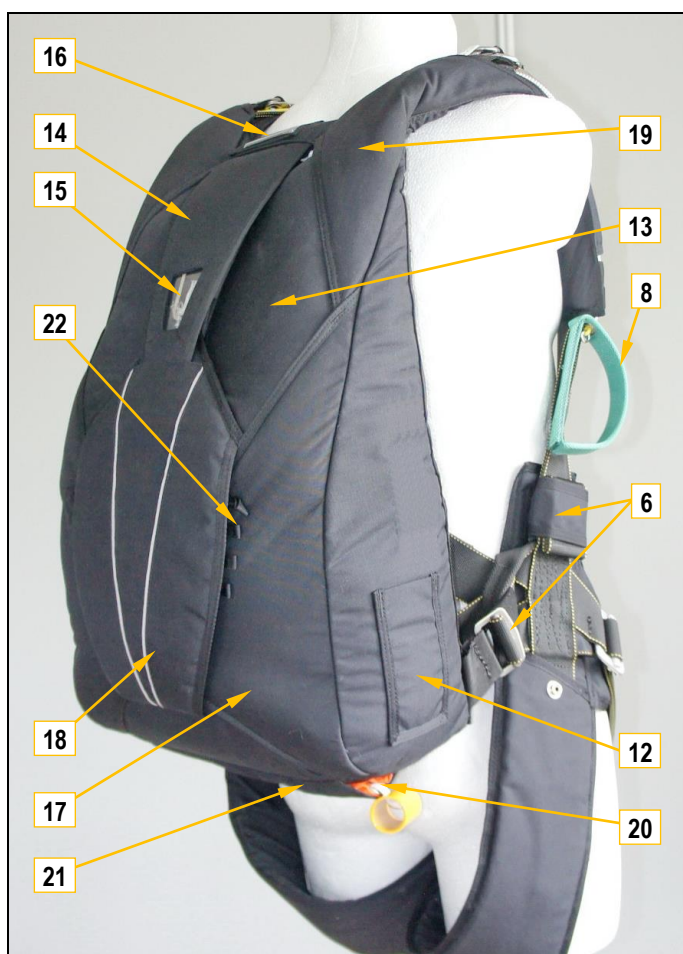
The reserve canopy container is closed with a single closing pin, and fitted with a deployment handle placed on the left main harness strap. It is fitted with a spring-loaded pilot chute placed entirely within the container, and a reserve canopy free-bag with an integrated connecting tape allowing use with the "Smart Loop" system. The container allows the assembly of an Automatic Activation Device (AAD) initiating the reserve canopy deployment process. The standard design of the harness/container includes a detachable RSL (Reserve Static Line) system, which deploys the reserve parachute immediately upon main parachute release. As an option, the Feniks system may be fitted with an extra RSL system component – the **"Smart Loop"**.

The "Smart Loop" design is based on the concept of shortening the time it takes for the reserve parachute free-bag to leave the container upon main canopy cutaway. In the traditional RSL system, after the main parachute has been released, the process of reserve parachute deployment is initiated by the container closing loop being pulled. This is where the RSL system purpose ends, and the reserve parachute is pulled out by the spring-loaded pilot chute mounted within the container. When coupled with the RSL system, not only will the "Smart Loop" open the reserve parachute container, but also pull the reserve parachute out, unfold the suspensions lines, and release the reserve parachute free-bag from the canopy. The main parachute canopy takes over as the deployment pilot chute, which – thanks to its significantly larger surface and the generated resistance – shall significantly accelerate the speed of the reserve parachute deployment process. Should the reserve parachute be deployed by the direct use of the deployment handle, the "Smart Loop" system is disconnected automatically, and the reserve canopy is pulled out of the container by the spring-loaded pilot chute.



Fot. 1

1. Chest strap
2. Chest strap buckle
3. Leg strap
4. Leg strap buckle
5. Vertical main harness strap
6. Harness adjustment system
7. Cutaway system
8. Cutaway handle grip
9. Reserve canopy deployment handle grip
10. RSL tape carabineer
11. Accessories attachment buckles (optional)
12. Static line carabineer pouch



Fot. 2

13. Reserve parachute container
14. Reserve parachute closing pin protection flap
15. Closing pin check window
16. Automatic Activation Device control panel window
17. Main parachute container
18. Main parachute closing pin protection flap
19. Riser flap
20. Hand-deployed collapsible pilot chute handle
21. Main parachute hand-deployed collapsible pilot chute pouch
22. Rubber stows used for static line attachment

2. TECHNICAL DATA

Container model	Container size (H x W x D) [mm]	Reserve canopy [or similar volume]	Main canopy [or similar volume]
Feniks STUDENT 101	500x330x160	R-Max 240, R-Max 288, Falcon 265, Raven III, Raven IV	Voyager 240, Voyager 260, Falcon 265, Silhouette 230

Main parachute deployment system:

- Hand-deployed collapsible pilot chute placed in bottom-of-container pouch, or
- Static line with canopy bag, attached to the aircraft.

Reserve parachute deployment system:

- Manual deployment with the use of a handle placed on the left main harness strap, under the chest strap, on the outer side, or
- By the RSL system, or
- By the Automatic Activation Device.

It is allowed to use parachute canopies differing in size from those quoted in this Instruction Manual provided that all conditions specified in Instruction Manual parts concerning parachute canopy assembly have been fulfilled.

3. LIMITATIONS AND RESTRICTIONS

1. Maximum operating load: 181,4 [kg] / 400 [lb]
2. Maximum operating speed: 277,8 [km/h] / 150 [kts]
3. Maximum storage time for packed reserve parachute: 360 days
4. Maximum storage time for packed main parachute: 360 days

4. SYSTEM COMPONENTS:

1. Container with harness: 033.130.00.00-(**model No.**)
2. Static line: NA-10-03
3. Pilot chute (main parachute): NA-23.880
4. Spring-loaded pilot chute (reserve parachute): NA-38.1
5. Pilot chute connecting tape (main parachute): NA-48
6. Main canopy bag: NA-16.(**model No.**)
7. Reserve canopy free-bag: NA-17.S(**model No.**)
8. Main canopy risers: 033.150.00.00
9. Main canopy steering toggles (yellow): NA-25
10. Main canopy steering toggles (red): NA-24
11. Main canopy cutaway handle (tape): NA-43.45.1.P-520/1000
Optional: Main canopy cutaway handle (pillow): NA-43.47.1.P-550/1030
12. Reserve canopy deployment handle (tape): NA-29.45.2.L-695
Optional: Reserve canopy deployment handle (metal D-ring): NA-29.44.2-695
13. RSL system tape: NA-22.01
14. "Smart Loop" system line: NA-22.02
15. Main parachute closing loop: NA-51
16. Reserve parachute closing loop: NA-19

5. LIST OF LIMITED LIFE CYCLE COMPONENTS:

1. Suspension line rubber stows: 2" x 3/8"
2. Suspension line rubber stows: 11/4" x 3/8"
3. Reserve canopy free-bag loop: NA-28

SECTION II

RESERVE PARACHUTE COMPONENTS ASSEMBLY

Any maintenance or servicing of the reserve parachute may only be performed by a person authorised to do so under domestic legislation of the country where parachute/skydiving jumps shall be performed.

The Feniks harness/container system is compatible with practically all certified ram-air canopies available on the market. Nonetheless, it should be checked whether the recommended canopy size is appropriate. A too-small canopy may cause accidental container opening, while a canopy packed too tightly may increase the force required to pull the release handle. Notably, canopy size after packing depends on a variety of factors: temperature, moisture, manner of unpacked canopy storage, and the packing technique. To ensure reliable reserve parachute functioning, the user should pay attention to the general canopy size after packing as well as to threshold closing loop length values, and to the force required to pull the reserve canopy deployment handle in the planned direction.

Contact Air-Pol in case of any doubt as to the canopy type compatible with your container.

ATTENTION!

The force required to pull the deployment handle shall be no less than 2.25 kg and no more than 9.9 kg in directions ensuring easiest and most difficult deployment (+ 45° from the most favourable direction), respectively.

1. CONNECTING THE RESERVE CANOPY TO RISERS

Connect the canopy with suspension lines and slider to harness/container risers following the canopy manufacturer's owner's manual. Check the canopy-container alignment twice. Check for twisted and/or interwoven parachute canopy suspension lines twice.

Components connecting the canopy to the risers are delivered with the parachute canopy.

If twisted links, such as French, or Rapide connector links are used, make sure that they have been twisted snugly and correctly. Tighten them manually as hard as possible, then add a quarter turn with the aid of a tool (spanner). If connector link casings are used, make sure that they are protected against sliding off the links.

If the canopy is delivered with soft links, follow the respective assembly manual delivered with the links.

Should you decide to connect the reserve canopy using soft links not delivered with that canopy or not offered by Air-Pol, make sure that such links are duly certified for use in reserve canopy assembly.

2. STEERING TOGGLES ASSEMBLY

Use correct (red) steering toggles appropriate for the harness/container system.

Check the reserve parachute canopy owner's manual for information whether the manufacturer has specified a method of connecting toggles to steering lines.

Steering toggles should be mounted at an identical distance from the parachute canopy on "telltale" markers on steering lines. A different way of assembly may result in limitations to reserve canopy performance, and make canopy piloting more difficult.

Should a used canopy be assembled, special attention should be paid to whether steering line length is correct.

Prior to assembly, make sure that steering lines have been threaded correctly from the canopy through to guide rings on the risers. Lines leading from the canopy should be free of twists and interweaving, and threaded through correct slider grommets directly to riser rings. The right steering line shall be threaded through the right rear slider grommet to the ring on the right riser. The same principle applies to the left steering line.

Should the steering line on the canopy to be assembled be equipped with a factory-fitted loop, it shall be threaded from under the toggle through the grommet. Then the lower part of the toggle shall be threaded through the line loop. Finally, the line shall be tightened on the toggle and grommet.

Should steering lines on the canopy to be assembled not be factory-fitted with loops, follow the instructions below when assembling the canopy.

There are several methods of fastening steering lines to toggles, depending on the steering line type used.

2.1. DACRON Steering Lines (larger diameter lines).



Fot. 3

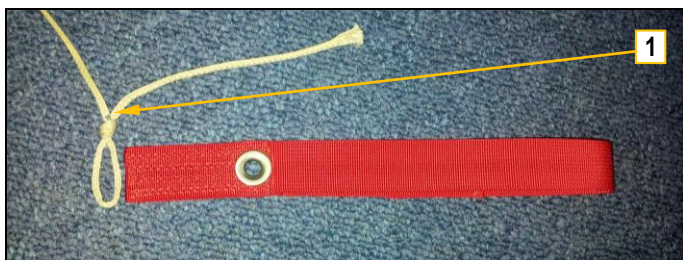
1. Thread the steering line through the grommet from under the toggle (from the part of the toggle fitted with mounting flaps).
2. Wrap the toggle from one side with the steering line and thread it through the grommet starting from the upper part of the toggle.
3. Wrap the other side of the toggle and thread it through the grommet from below.
You have an 8-shaped weave



Fot. 4

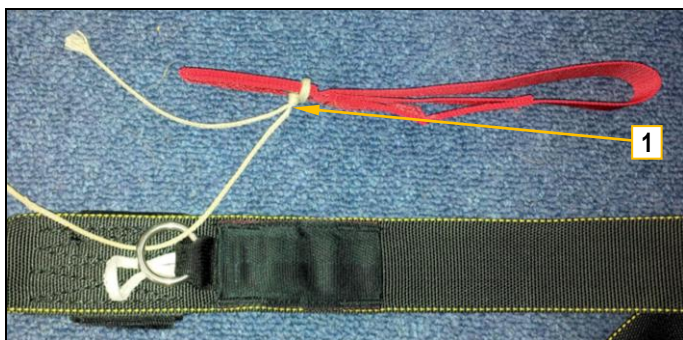
4. Adjust the weaves so that the "telltale" marker on the steering line is located against the edge of the grommet in the lower part of the toggle.
5. Tie a knot as close to the grommet as possible. Leave some excess line, should steering line adjustments be required.
6. Repeat the procedure for the other steering line.
7. Check the length and symmetry of steering lines.

2.2. Microlines (Spectra, Vectran, HMA, etc.).



Fot. 5

1. Make a loop on the steering line below the "telltale" marker (1) by tying a knot.
The loop should be approximately 5 mm wider than the steering toggle tape.



Fot. 6

2. Thread the loop through the grommet from under the toggle (from the part of the toggle fitted with mounting flaps), then thread the lower part of the toggle through the loop. Finally, tighten the line on the toggle and grommet.
3. Leave some excess line, should steering line adjustments be required.
4. Repeat the procedure for the other steering line.
5. Check the length and symmetry of steering lines.

3. AUTOMATIC ACTIVATION DEVICE (AAD) ASSEMBLY

All Feniks containers are delivered with components required for the mounting of CYPRES AADs duly tested and approved for use by Airtec, the AAD manufacturer.

Any AAD resembling CYPRES in design may be mounted on the Feniks container, provided that such an AAD:

- Is fitted with a central unit mounted on the bottom surface of the reserve parachute container,
- Is fitted with a device to cut a closing loop mounted on the side flap above the spring-loaded pilot chute,
- Is fitted with a control panel appropriate for mounting in a pouch on the top of the container.

Prior to AAD assembly, read its owner's manual, and become familiar with its limitations and specificity. Check for service validity, proper battery condition, and whether the device can be switched on properly.

Proceed with assembly only when the AAD is switched off.



Fot. 7

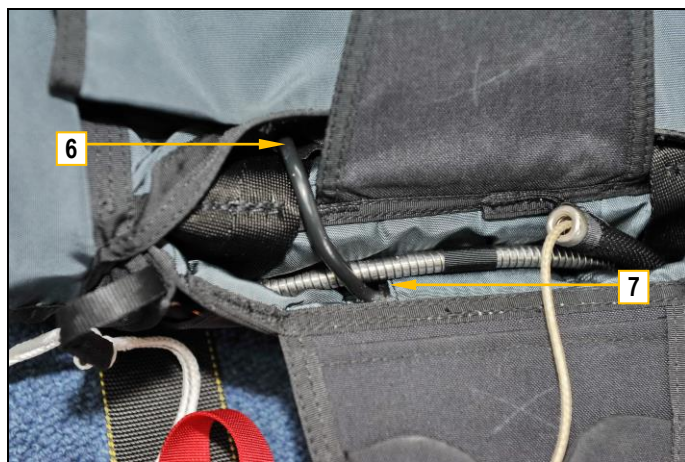
Components required for CYPRES AAD assembly are placed in each delivered unit of the Feniks harness/container system.

- Central unit pouch (1)
- Cutter cable orifice (2)
- Cutter cable casing (3)
- Flexible cutter handle/tape (4)
- Entry point of the control panel cable (5)
- Exit point of the control panel cable (6)
- Control panel pouch in the top of the container (7).



Fot. 8

1. Place the AAD central unit in the pouch (1) on the bottom surface of the reserve parachute container.
2. Thread the AAD cutter through the orifice (2) in the bottom flap, then through the casing (3) on the side flap, and place the cutter's operating edge in the rubber pouch (4).
3. Place any excess cable in the AAD pouch (1), following the AAD owner's manual.



Fot. 9

4. Thread the control panel through the orifice in the bottom of the reserve parachute container (5) and through to the exit point in the upper part (6), then – pushing it through the opening – place the control panel in the transparent pouch under the last flap (7).
5. Place any excess cable in the AAD pouch (1), following the AAD owner's manual. It is possible to place the control panel cable in a casing on the bottom of the container (5).
6. Make sure all cables are protected against sharp edges, and exposed as little as possible outside their respective casings/pouches.

SECTION III

PACKING THE RESERVE PARACHUTE

After having met all the requirements specified in Section Two of this Instruction Manual you can proceed with packing the reserve parachute. Nonetheless, before you proceed read the entire Section of this Manual, which describes the procedure of assembly and packing of the reserve parachute.

Given the vast array of reserve canopies available on the market, this Instruction Manual does not cover the procedure required for the periodical check (maintenance), assembly, or packing of the reserve parachute canopy. To that end, follow the relevant owner's manual delivered with the reserve canopy.

Before you begin packing the reserve parachute, make sure that all components used are appropriate for the harness/container, and fully operational – otherwise the system may not function properly.

The reserve parachute may be packed only by a person authorised to do so under domestic legislation of the country where parachute/skydiving jumps shall be performed.

1. COMPONENTS REQUIRED TO PACK THE RESERVE PARACHUTE AS A JUMP-READY SYSTEM

- Feniks harness/container (including risers and reserve canopy steering toggles)
- Ram-air reserve canopy, including suspension lines and a slider
- Spring-loaded pilot chute
- Reserve canopy bag with connecting tape
- Rubber loop for the canopy free-bag
- CYPRES woven closing loop, including the CYPRES disc
- RSL tape, including line and closing pin
- "Smart Loop" system line (optional)
- Deployment handle

2. MAINTENANCE CHECK OF ALL COMPONENTS

Before proceeding to pack a reserve parachute as a jump-ready system, each and every reserve parachute system component shall be maintenance-check assessed.

Check for the following: wear, cracks, stratification, corrosion, and/or damage to fabric, netting, tapes, straps, lines, stitching, metal components and their connectors, and to individual component connectors.

3. PACKING TOOLS

All tools should be duly marked for easy location in a parachute under maintenance.
You may find the following tools useful:

- Weights or spring-loaded clamps
- CYPRES silicone for moistening the closing loop (if AAD fitted)
- Temporary closing line (CYPRES line, if AAD fitted)
- Temporary closing pin
- Packing rulers (wooden or metal)
- NSN 8310-01-493-6030 sealing thread, break resistance no higher than **2.15 kg (4.75 lbs)**
- Paper or lead seal
- Tape with buckle
- Scissors
- Flap clamping and closing plate
- Soft Velcro tape sections

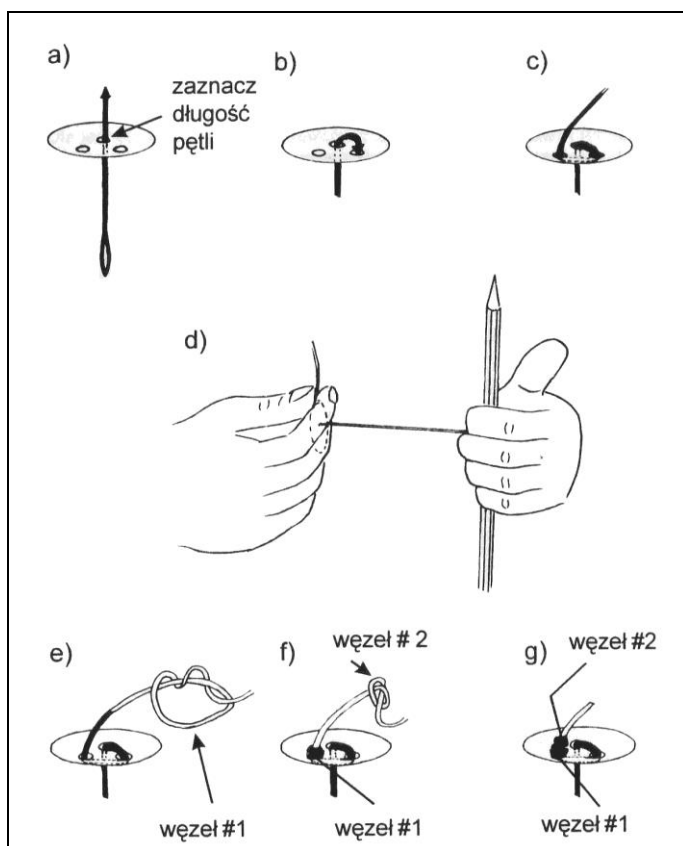
ATTENTION!

Always be aware what tools you used and how many.

If you leave a tool in the reserve parachute, this may lead to its malfunction.

After you finish packing, count your tools. Their number has to be identical to the number you began packing with!

4. SYSTEM COMPONENT ASSEMBLY



Rys. 1

1. Prepare the reserve parachute container closing loop, and place it in the container bottom stiffener. Follow the AAD owner's manual to meet the requirements for the given AAD.

Use materials approved by the given AAD manufacturer only.

The Feniks harness/container system is delivered with a closing loop required for the CYPRES AAD.

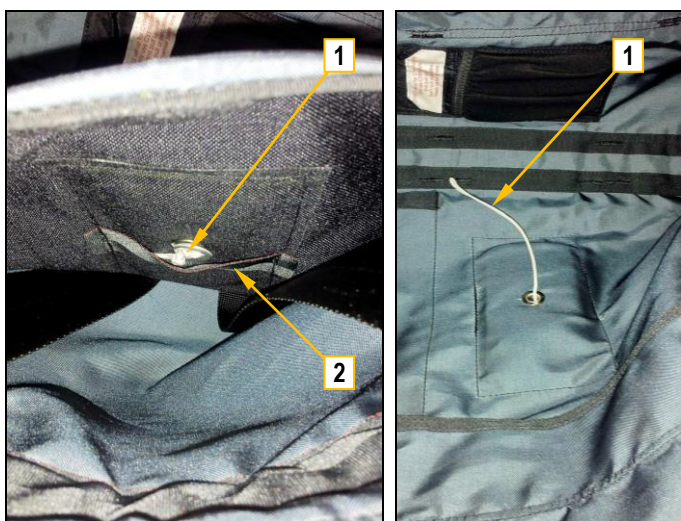
The figure shows the way of preparing the closing loop for the CYPRES AAD. In case of other AADs, the procedure of preparing the closing loop may differ from that described in this Instruction Manual. In such case, prepare the closing loop following the owner's manual for the AAD used.

The recommended length of the closing loop from disc exit to loop end measures 11-16 cm.

ATTENTION!

It may be necessary to adjust the closing loop length upon closing the container. If the parachute was packed, check – prior to opening the container – whether the loop length was correct. The pilot chute should be compressed in a way preventing the top of the pilot chute from swinging inside the container.

The force required to pull the deployment handle shall be no less than 2.25 kg and no more than 9.9 kg in directions ensuring easiest and most difficult deployment ($\pm 45^\circ$ from the most favourable direction), respectively.



Fot. 10

2. Place the closing loop (1) in the bottom of the container, threading it through the grommet from the inside.
The part of the loop with the disc should be placed in the pouch (2) to prevent it sliding out.



Fot. 11

3. Place the deployment handle in the pouch firmly, and secure it with Velcro tape.
4. Place the line in the protective casing.



Fot. 12

5. Tie a granny knot to connect the RSL tape to the line with the pin.



Fot. 13

6. If using the "Smart Loop" system, attach a line with "Smart Loops" to the RSL tape. The larger loop should remain free.



Fot. 14

7. Place the RSL tape in the container. The part with the carabiner should be placed against the riser ring. The part with the closing pin (and the "Smart Loop" line) should be placed against the reserve parachute container. After you finish assembly, check whether the tape is free of twists, firmly secured with Velcro tape, and properly wrapped in the casing.



Fot. 15

8. Fasten the RSL carabiner temporarily on the riser ring on the inner side of the harness.

ATTENTION!

The entire system **MUST** be placed under reserve parachute risers, allowing system release from the container on the inner side of the harness.

5. CONNECTING THE RSL SYSTEM TO RISERS



Fot. 16

1. The main parachute risers must be attached to the harness.
2. Make sure that the RSL tape is leading directly out of the pouch/casing to the inside of the container under the reserve parachute risers (1).
3. Close the RSL carabiner on the main parachute riser (2).

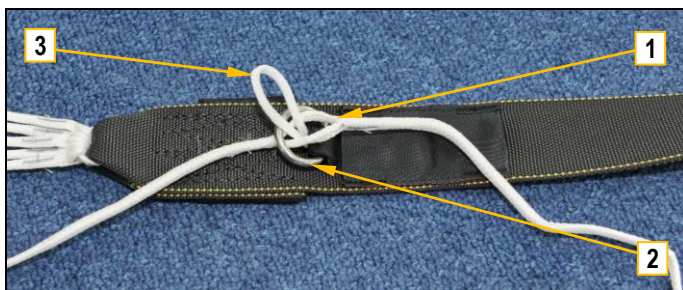
ATTENTION!

Threading the RSL tape over the reserve parachute risers may interfere both with the main canopy cutaway and the reserve parachute deployment processes.

Using the RSL system is not obligatory. Under certain conditions, use of the RSL system is not recommended as stipulated in local or training methodology. The RSL system may be disconnected at any time. To disconnect the RSL system, open the carabiner.

When planning a jump, in the course of which the use of the RSL system is not recommended, open the carabiner and place it in the harness casing (3) between the chest strap and the largest ring of the three-ring release system to prevent its accidental slide-out.

6. STOWING BRAKE LINES AND ATTACHING STEERING TOGGLES TO RISERS



Fot. 17

1. Unfasten the Velcro tape protecting the block/stop-ring and excess steering line. Keep the hooked side away from the canopy suspension lines.
2. Pull on the steering line to thread the loop (1) on the line through the guide ring (2), leading it down and under.
3. Thread the blocking loop (3) of the toggle through the steering line loop as shown in the photograph.



Fot. 18

4. Place the toggle's block/stop-ring in the blocking loop ONLY.
5. The steering line shall be blocked with the blocking loop ONLY.



Fot. 19

6. Attach the toggle to the riser with the use of toggle flaps and the riser pouch.



Fot. 20

7. Place any excess line left after its blocking in the loop on the line stop-ring-block, and secure it with Velcro tape.
8. Remember to keep the line away from the hooked side.



Fot. 21

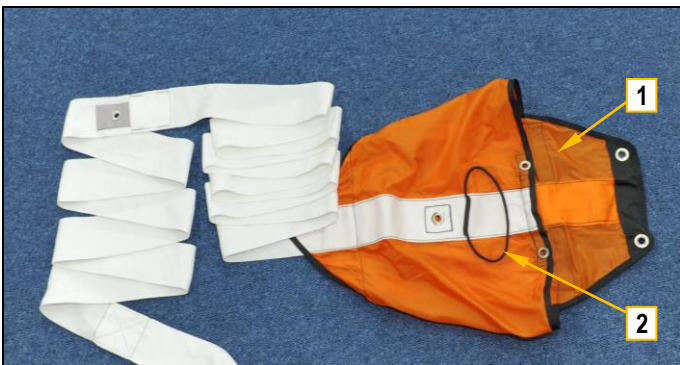
9. Repeat the procedure for the other steering line.

7. FOLDING THE CANOPY AND PREPARING IT FOR PLACEMENT IN THE FREE-BAG



Fot. 22

1. Tie a granny knot to attach the canopy free-bag tapes to the loop at the base of the spring-loaded pilot chute.



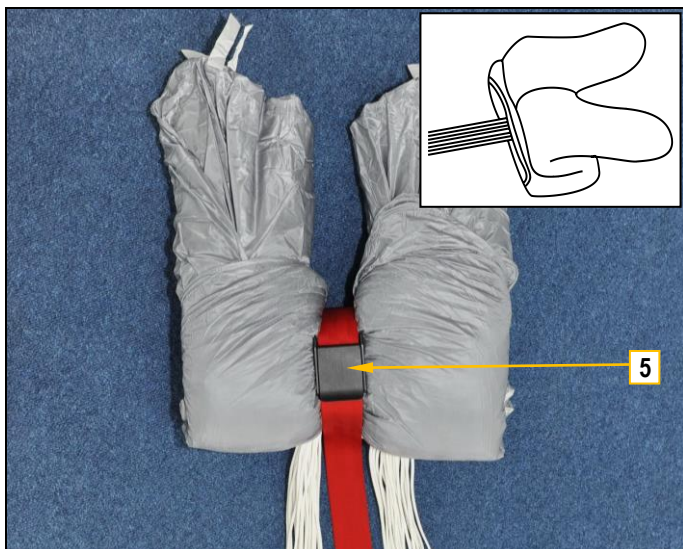
Fot. 23

2. Prepare the reserve parachute free-bag (1) and the free-bag closing loop (2).



Fot. 24

3. Place the free-bag closing loop in the free-bag casing (3).
4. Thread the loop ends through grommets (4) at the exit opening of the casing.

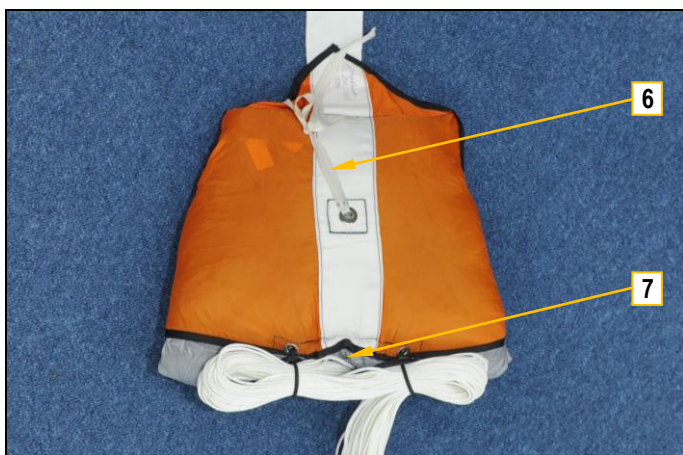


Fot. 25

5. Follow the owner's manual of the given canopy when folding the canopy, the leading edge, and the trailing edge, and determining the position of the slider.
6. The Feniks container requires that the reserve parachute canopy be U-shape packed, allowing the closing loop to be threaded through the inside of the free-bag.
7. The folded canopy should be approximately 5 cm wider than the free-bag. This allows for the free-bag and the reserve parachute container to be well filled.

ATTENTION!

In the photograph, the canopy is blocked with a tape (5) which must be removed after closing the free-bag.

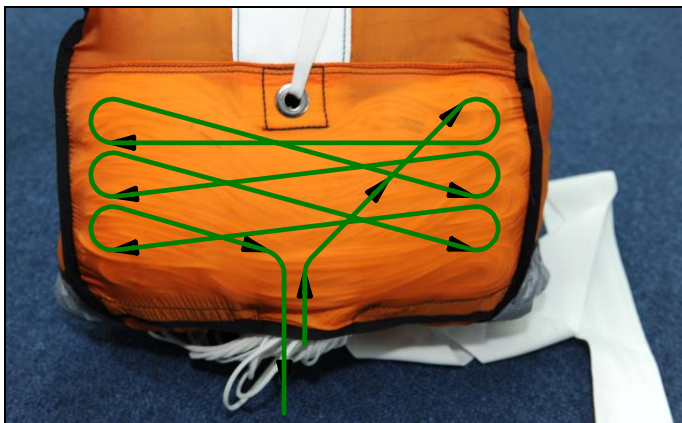


Fot. 26

8. Thread the temporary closing line (6) through the eyes in the upper and lower free-bag surfaces.
9. Place the prepared canopy inside the free-bag filling it snugly, and form it to fit the shape of the reserve parachute container.
10. Thread the canopy suspension lines between the eyes (7).
Close the free-bag with the closing flap by threading appropriate ends of the rubber loop through the flap's grommets, and block it with line weaves.
External weaves shall be no less than 5 cm in length.

ATTENTION!

If using a buckled tape (5) to keep the folded canopy in place – make sure it was removed! (Photo No. 25).



Fot. 27

11. Place suspension lines in the pouch in the bottom of the free-bag as shown in the photograph.
Before placing lines in the pouch, secure the hooked side of the Velcro tape with a temporary Velcro tape section.
12. Leave approximately 30 cm of suspension lines unwoven.
13. Remove temporary Velcro tape sections and close the line pouch.
Make sure that canopy suspension lines are not trapped between Velcro tape sections.



Fot. 28

14. Tighten suspension lines, and place them on the bottom of the container. Place any unwoven canopy suspension lines symmetrically, avoiding entanglement.
To improve the comfort factor, risers may be placed next to each other, so that risers with steering toggles remain on the outside.
15. Place the reserve parachute canopy – folded into the free-bag – in the container.
16. Correct the way the canopy is placed in the container, making sure the container is snugly filled. There should be as little free space as reasonably possible. Pay special attention to lower container corners.

Photographs Nos. 29 through 38 show the procedure of closing the reserve parachute container from the perspective of the rigger, working at the upper part of the container (the main parachute container is visible in the upper part of the photograph).



Fot. 29

17. Close flap No. 1, threading the temporary line with the closing pin through its grommet, and block it with the temporary closing pin.
18. Adjust the placement of the weaves of lines closing the canopy free-bag. They should be placed in the upper corners of the lower part of the container.
19. Arrange the connecting tape in a V-shape up to the mounting location of a part of the "Smart Loop" system (8).



Fot. 30

20. Thread the temporary line and closing loop through flap No. 2 and block it with the temporary closing pin formerly removed from the loop.

In the photograph, the line with "Smart Loops" (9) prepared for use has been placed on flap No. 2.

Should the "Smart Loop" system not be used, that line will be absent.

If not fitting the harness/container with the “Smart Loop” system, skip items 21-24 and item 33 (all items marked green).



Fot. 31

21. Place the “Smart Loop” line (9) in the pouch (10) on flap No. 2. Line tucks should be aligned after the line is folded.



Fot. 32

22. Place the section with the connecting tape eye on flap No. 2 to enable threading the “Smart Loop” line through the tape eye (11).



Fot. 33

23. Block the loop leading out of the eye with the remaining section of the connecting tape.

ATTENTION!

The loop block (12) should be approximately **10 cm** in length, allowing the free-bag tape pouch to be filled snugly.

24. Place the folded tape (12) blocking the “Smart Loop” line in the tape pouch (13) next to the eye.



Fot. 34

25. Arrange the remaining free-bag tape in a V-shape.
26. Thread the temporary line through the pilot chute spring (14) from underneath, and then through the eye in the top of the pilot chute.

ATTENTION!

Make sure that the temporary line is not placed on the outside of the spring coil.

27. Place the pilot chute base centrally around the eyes of closed flaps (15).



Fot. 35

28. Compress the spring to prevent the trapping of pilot chute material and/or netting between spring coils.
29. Block the spring with the closing pin formerly removed from the temporary loop, and place it in the closing loop again.
30. Arrange the pilot chute material and netting around the spring



Fot. 36

31. Thread the temporary line through the cutting edge of the AAD (if fitted), and then through the eyes of flaps Nos. 3 and 4.
32. At the same time, tighten the temporary line until flap eyes meet at the closing loop. Remove the temporary pin and block it above flap No. 4.

Patting container sides helps when closing the container. Moreover, using knees and stiff knee plates around flap eyes makes it easier to close the flaps without applying excessive force.



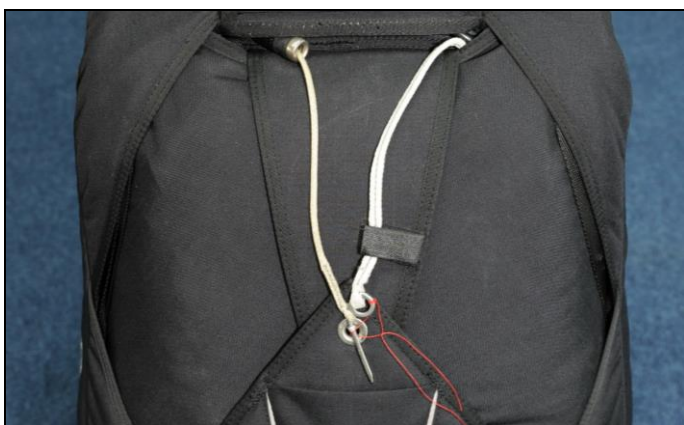
Fot. 37

33. Place the "Smart Loop" line, including the attachment knot, under upper flap No. 5.



Fot. 38

34. Thread the temporary line through the eyes of flaps Nos. 5 and 6, and block the closing loop with the formerly removed temporary closing pin.



Fot. 39

35. Thread the RSL line pin through the handle line loop, and place it in the closing loop after having removed the temporary closing pin. The RSL system closing pin eye should be located at an approximate distance of 5 mm from the flap eye edge.
36. Attach the Velcro tape of the line with the closing pin placed on the upper flap.
37. Seal the parachute with sealing thread **NSN-8310-01-493-6030** sealing thread, break resistance no higher than 2.15 kg (4.75 lbs).



Fot. 40

38. Close the closing pin protective flap by placing its edges (16) under flap No. 5. Place the lower part of the protective flap in the pouch/casing (17) on flap No. 6.



Fot. 41

39. Shape the reserve parachute closed in the container by pressing against it gently and smoothly with your knees or hands. Use a rigging ruler if necessary.

ATTENTION!

After you finish packing, count your tools. Their number has to be identical to the number you began packing with!

SECTION IV

MAIN PARACHUTE COMPONENTS ASSEMBLY

The Feniks harness/container system is compatible with practically all certified ram-air canopies available on the market. Nonetheless, it should be checked whether the recommended canopy size is appropriate. A too-small canopy may cause accidental container opening, while a canopy packed too tightly makes it impossible to open the container (the pilot chute in tow malfunction).

Notably, canopy size after packing depends on a variety of factors: temperature, moisture, manner of unpacked canopy storage, and the packing technique. To ensure reliable parachute functioning, the user should pay attention to the general canopy size after packing as well as to threshold closing loop length values, and to the force required to pull the reserve canopy deployment handle in the planned direction.

ATTENTION!

The force required to pull the deployment handle shall be no less than 2.25 kg and no more than 5.5 kg.

The parachute may be assembled/connected to the Feniks harness/container system only by a person authorised to do so under domestic legislation of the country where parachute/skydiving jumps shall be performed.

Given the vast array of canopies available on the market, this Instruction Manual does not cover the procedure required for the periodical check (maintenance), assembly, or packing of the parachute canopy. To that end, follow the relevant owner's manual delivered with the canopy.

The Feniks system allows for the following main parachute deployment methods:

- Hand-deployed collapsible pilot chute (item 4 hereto).
- Deployment by static line, with the canopy bag attached (item 5 hereto)

1. CONNECTING THE MAIN CANOPY TO RISERS

Connect the canopy with suspension lines and slider to harness/container risers following the canopy manufacturer's owner's manual. Check the canopy-container alignment twice. Check for twisted and/or interwoven parachute canopy suspension lines twice.

ATTENTION!

One riser is fitted with a ring to attach the RSL system tape carabineer. Before assembling the canopy make sure that the riser with the RSL system ring is on the right (the ring should be facing the inner riser surface).

Components connecting the canopy to the risers are delivered with the parachute canopy.

If twisted links, such as French, or Rapide connector links are used, make sure that they have been twisted snugly and correctly. Tighten them manually as hard as possible, then add a quarter turn with the aid of a tool (spanner). If connector link casings are used, make sure that they are protected against sliding off the links.

If the canopy is delivered with soft links, follow the respective assembly manual delivered with the links.

Should you decide to connect the reserve canopy using soft links not delivered with that canopy or not offered by Air-Pol, make sure that such links are duly certified for use in reserve canopy assembly.

2. STEERING TOGGLES ASSEMBLY

Use correct (yellow) steering toggles appropriate for the harness/container system.

Check the reserve parachute canopy owner's manual for information whether the manufacturer has specified a method of connecting toggles to steering lines.

Steering toggles should be mounted at an identical distance from the parachute canopy on "telltale" markers on steering lines. A different way of assembly may result in limitations to reserve canopy performance, and make canopy piloting more difficult.

Should a used canopy be assembled, special attention should be paid to whether steering line length is correct.

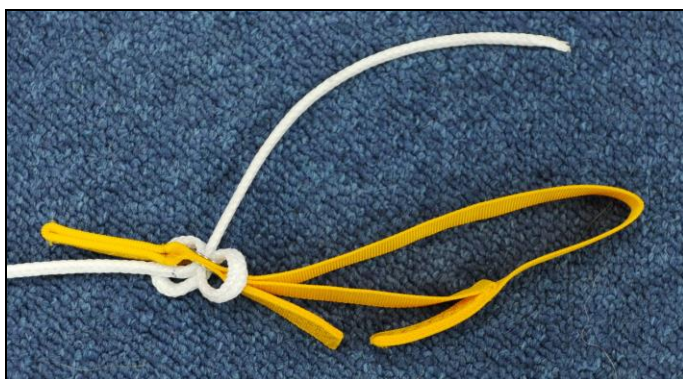
Prior to assembly, make sure that steering lines have been threaded correctly from the canopy through to guide rings on the risers. Lines leading from the canopy should be free of twists and interweaving, and threaded through correct slider grommets directly to riser rings. The right steering line shall be threaded through the right rear slider grommet to the ring on the right riser. The same principle applies to the left steering line.

Should the steering line on the canopy to be assembled be equipped with a factory-fitted loop, it shall be threaded from under the toggle through the grommet. Then the lower part of the toggle shall be threaded through the line loop. Finally, the line shall be tightened on the toggle and grommet.

Should steering lines on the canopy to be assembled not be factory-fitted with loops, follow the instructions below when assembling the canopy.

There are several methods of fastening steering lines to toggles, depending on the steering line type used.

2.1. DACRON Steering Lines (larger diameter lines).



Fot. 42

1. Thread the steering line through the grommet from under the toggle (from the part of the toggle fitted with mounting flaps).
2. Wrap the toggle from one side with the steering line and thread it through the grommet starting from the upper part of the toggle.
3. Wrap the other side of the toggle and thread it through the grommet from below.
You have an **8-shaped weave**



Fot. 43

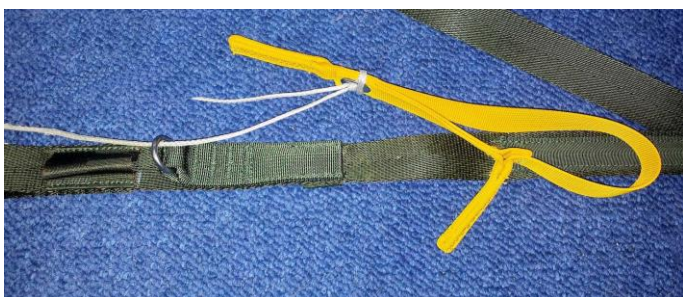
4. Adjust the weaves so that the "telltale" marker on the steering line is located against the edge of the grommet in the lower part of the toggle.
5. Tie a knot as close to the grommet as possible. Leave some excess line, should steering line corrections be required.
6. Repeat the procedure for the other steering line.
7. Check the length and symmetry of steering lines.

2.2. Microlines (Spectra, Vectran, HMA, etc.)



Fot. 44

1. Make a loop on the steering line below the "telltale" marker (1) by tying a knot. The loop should be approximately 5 mm wider than the steering toggle tape.



Fot. 45

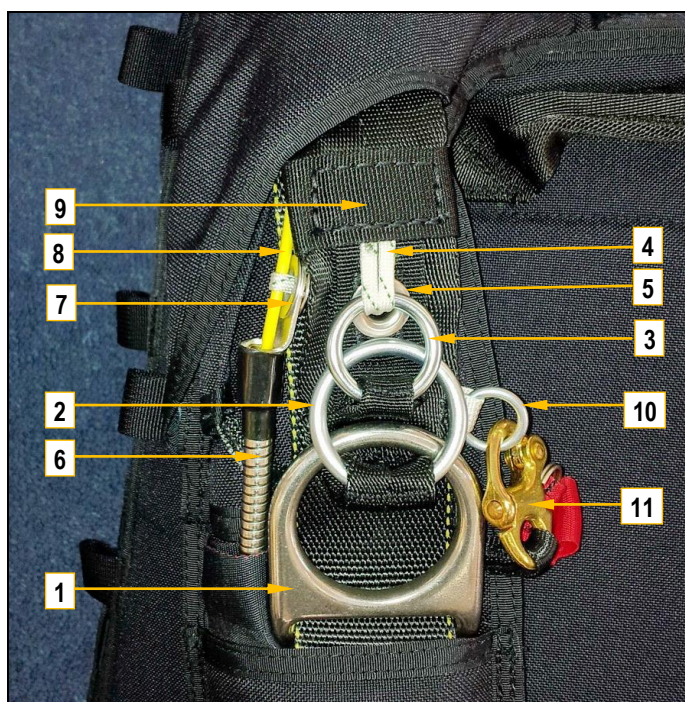
2. Thread the loop through the grommet from under the toggle (from the part of the toggle fitted with mounting flaps), then thread the lower part of the toggle through the loop. Finally, tighten the line on the toggle and grommet.
3. Leave some excess line, should steering line corrections be required.
4. Repeat the procedure for the other steering line.
5. Check the length and symmetry of steering lines.

3. CONNECTING MAIN PARACHUTE RISERS TO THE HARNESS/CONTAINER. THE THREE-RING SYSTEM.

3.1. THREE-RING RELEASE SYSTEM ASSEMBLY

The release system serves the purpose of cutting away the main canopy in case it does not inflate properly (in case it malfunctions). Each Feniks harness/container system is fitted with an "Anti-Twist" system preventing a difficult or impossible pull-out of the cutaway handle in a suspension line twist situation.

The release system consists of the following components, all of which have to be checked prior to assembly (whether they are operational and clean):



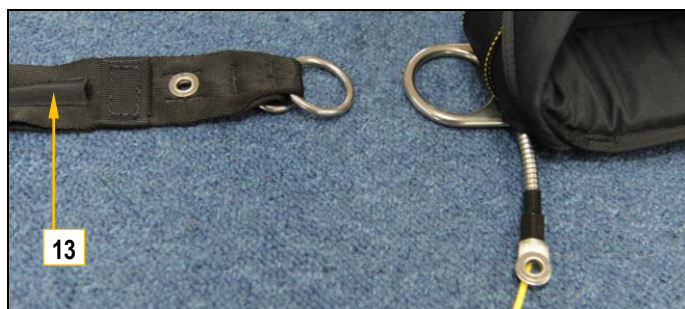
Fot. 46

- Harness ring – largest (1)
- Terminal riser ring – medium (2)
- Closing loop ring – smallest (3)
- Closing loop (4)
- Riser ring (5)
- Protective casing of the yellow blocking cable (6)
- Protective casing eye (7)
- Yellow blocking cable (8)
- Main parachute riser (9)
- RSL system tape connector ring (10)
- RSL system tape carabineer (11)
- Cutaway handle (12)
- Protective casing of the loose end of the yellow blocking cable (13)



Fot. 47

1. Place yellow cables (8) in protective casings, the ends of which are placed between chest strap layers.
2. Place the cutaway handle (12) in the pouch between the right-hand side vertical main straps of the harness. The handle shall be attached to the straps firmly and deeply with the use of Velcro tape.

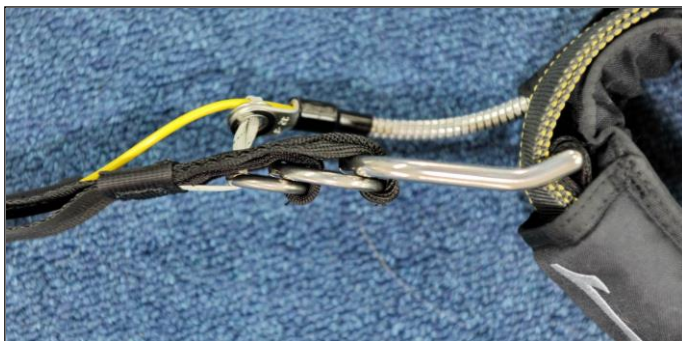


Fot. 48

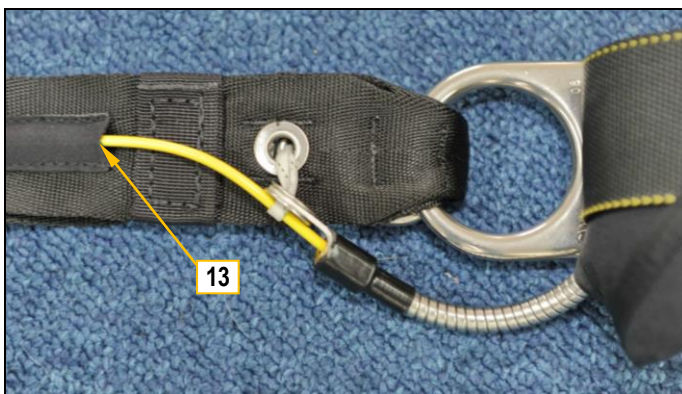
3. Prepare the parachute canopy for connection to the harness. The canopy's suspension lines should be free of entanglement. This is best done when the container and canopy are arranged as if for packing: the canopy should be placed with cell openings (vents) facing downwards, the harness/container's flaps should be facing upwards. Untwisted risers should be placed in front of the container – riser rings should be lower, steering toggles should be higher.



Fot. 49



Fot. 50



Fot. 51



Fot. 52

4. Take the medium ring (2) and thread it through the harness ring (1). Bend the riser to make the medium ring meet the smallest ring (3) sewn in above.
Proceed with caution to avoid riser entanglement and/or twisting.
5. Thread the smallest ring (3) through the medium ring (2) only, and place it on top of the medium ring.
6. Thread the closing loop (4) through the smallest ring (3) only, and then through the ring (5) to the other side of the riser.
7. Thread the closing loop (4) through the eye in the end section of the protective casing (7) of the yellow cables (8).
The eye of the casing shall be arranged in a manner allowing for the yellow cable to remain on top.
8. Place the yellow cable in the closing loop and pull until resistance is felt, taking care to bend it as little as possible.
9. Place the remaining section of the yellow cable in the pouch (13) on the rear riser.

When placing the cable in the pouch make sure that the cable was threaded into the pouch stiffener, not under the pouch (13).

ATTENTION!

When assembling new risers and placing the yellow cable in the pouch, pierce the tape on which the protective casing is mounted with the cable.

10. Repeat the procedure for the other riser.

ATTENTION!

Upon finishing assembly, check whether the risers and suspension lines are leading to the main parachute canopy as designed and free of any twists and/or interweaving, and whether the system itself has been assembled correctly.

3.2. RELEASE SYSTEM MAINTENANCE CHECK

The release system material has capacity for "shape recall" if kept in one position for an extended period. This is why the three-ring system should be disconnected, "loosened", and reassembled every 3 months. Should the procedure not be followed, it may be difficult to disconnect risers from the harness under little tension during a malfunction (such as a snivel, or prolonged canopy deployment).



Fot. 53

1. Grip the top ring and the tape above the clasp, and twist one way and then the other allowing the tapes to forget the shape they recalled.
2. Repeat the procedure for all ring mount tapes, and for the release system blocking loop.

When maintenance-check assessing the release system, check for the following, in particular:

- That each ring is threaded through one other ring only (the medium through the large, the small through the medium),
- That the closing loop is threaded through the smallest ring only, and through the eye in the tape and the end of the protective casing,
- That the closing loop is free of twists and that the yellow cable is the only component threaded through it,
- That the cutaway handle is firmly attached to the harness, with the yellow cables as invisible as reasonably possible between the handle grip and the protective casing.

ATTENTION!

Check your three-ring release system no less frequently before the first jump on any given day.

4. HAND-DEPLOYED COLLAPSIBLE PILOT CHUTE – CONNECTING TAPE AND MAIN CANOPY BAG ASSEMBLY



Fot. 54

1. Connect the connecting tape to the parachute by threading the loop farther from the closing pin through the loop at the base of the pilot chute and the central line loop.
2. Adjust and tighten the knot.



Fot. 55

3. Thread the loose end of the connecting tape through the central opening in the main canopy bag, and then – together with the inner loop of the canopy bag – through the attachment point located on the upper main canopy surface.

It is also allowable to skip the inner loop in the canopy bag when assembling subcomponents. In such case make sure that the canopy fabric was not trapped in the closing loop when placing the canopy in the bag.



Fot. 56

4. Tie a granny knot by threading the pilot chute and the bag through the connecting tape loop.



Fot. 57

5. Untwist and adjust the knotted tapes, and tighten the knot by hand.



Fot. 58

6. Alternative method of attaching the connecting tape of the hand-deployed collapsible pilot chute.

5. STATIC LINE WITH CANOPY BAG ATTACHED – ASSEMBLY



Fot. 59

1. Thread the loop inside the main parachute canopy bag through the central eye of the bag.
2. Tie a granny knot by threading the end of the connecting tape through the canopy bag loop.
3. Adjust the knot you made in a way ensuring that the knotted tapes are free of twists, and tighten it by hand.

SECTION V MAIN PARACHUTE FOLDING AND PACKING

Given the vast array of canopies available on the market, this Instruction Manual does not cover the procedure required for the periodical check (maintenance), assembly, or packing of the parachute canopy. To that end, follow the relevant owner's manual delivered with the canopy.

ATTENTION!

Whenever packing a parachute system before a jump make sure that all system components are fully operational.

1. CONTAINER CLOSING LOOP

To prevent accidental main parachute container opening or a pilot chute in tow malfunction, the closing loop has to be duly prepared.

- We recommend the use of **TYPE IIA** line to make the closing loop.
- The recommended length of the closing loop is **3.5-6 cm**.
- Use metal washers with the inner diameter no more than 5 mm, and the outer diameter no less than 10 mm.
- Check the closing loop whenever closing the main parachute container. Replace the loop when the threads in its weave begin fraying. If a closing loop breaks during a skydive, a horseshoe malfunction may result



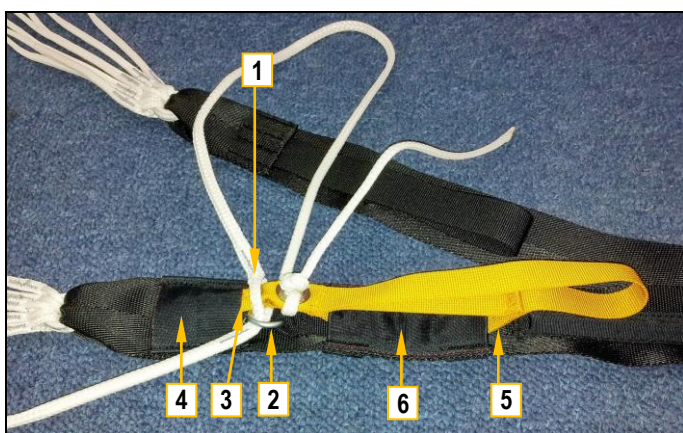
Fot. 60

1. Prepare the closing loop following the instructions above.
2. Place the loop in the eye of the bottom flap of the main parachute container.
3. Close the closing loop blocking flap (1) by placing it in the pouch (2).

ATTENTION!

It may be necessary to adjust the closing loop length upon closing the container. Adjust the closing loop length to ensure that the force required to pull the closing pin from the closing loop shall be no more than 5.5 kg, and no less than 2.5 kg.

2. STOWING CANOPY BRAKES



Fot. 61

1. Pull on the steering line to thread the loop (1) on the line through the guide ring (2), leading it down and under.
2. Place the stop-ring/block of the toggle (3) in the steering line loop, and then in the pouch (4) on the riser.
3. Attach the toggle to the riser by placing flaps (5) in the pouch on the riser (6).



Fot. 62

4. Place any excess line remaining after its blocking in the loop in pouches on the reverse side of the riser.

3. CLOSING THE BAG WITH THE HAND-DEPLOYED COLLAPSIBLE PILOT CHUTE ATTACHED

Assemble the main parachute following guidelines specified in Section Four item 5 of the Instruction Manual.

Before placing the canopy in the bag check the condition of the rubber stows. They should be of appropriate type, all of the same kind and grade, and undamaged. Replace stows if necessary.

- For "Dacron" lines we recommend the use of rubber stows 4 cm in diameter (~6 cm once the band is folded).
- For Microlines (Spectra, Vectran, HMA, etc.) use rubber stows 2 cm in diameter (~3 cm once the band is folded).



Fot. 63

1. Fold the canopy, the leading edge, and the trailing edge, and determine the position of the slider by following guidelines specified in the owner's manual of the given canopy.
The folded parachute canopy should be approximately 5 cm wider than the bag. This allows for the bag to be well filled, resulting in a more favourable bag shape.

2. Place the folded canopy in the bag. Check for parachute canopy fabric trapped between the canopy attachment point, connecting tape, and the eye of the bag – trapped fabric may be damaged during the deployment process.



Fot. 64

3. Lead suspension lines centrally out of the bag.
4. Close the bag with the closing flap, threading respective rubber stows through the eyes of the flap. Thread lines through bands starting with those in the middle, following them alternately with bands located on either side at a growing distance from the middle. The length of the line loop created when threading the suspension lines through the bands shall be no less than 5 cm beyond the rubber band.
5. Thread the remaining lines alternately on either side through rubber stows placed along the sides of the bag, leaving an approximate length of 50 cm of unthreaded lines. This will facilitate the process of releasing the bagged parachute from the container, and minimise the threat of a bag twist when suspension lines weave out.



Fot. 65

6. Shape the bag and the bagged canopy by gently pressing with your knees. This will also allow the release of air trapped in the canopy and the bag.

4. CLOSING THE MAIN PARACHUTE CONTAINER WITH THE HAND-DEPLOYED COLLAPSIBLE PILOT CHUTE ATTACHED



Fot. 66

1. Place the bag – free of twists and turns – with the canopy inside the main parachute container. Place all unthreaded suspension lines – free of entanglement – on the bottom of the container.

The bag may be placed in the container with the suspension lines facing the bottom or back of the container.



Fot. 67

2. Fill the container as best you can. You can kneel on the bag, and then, gripping the container flaps, push the bag in as deep as you can. This will also release any air trapped in the bag, which will make closing the container much easier.
3. Pull out the connecting tape, tighten it and place it in the direction of the upper right corner of the main parachute container.
4. Tighten and place risers along the reserve parachute container. Place risers in a way ensuring that the rear riser with the steering toggle is as close to the bottom of the container as possible, with the front riser above. At that point, risers may be excessively stretched; you will adjust them after having closed the main parachute container.



Fot. 68

5. Using the temporary closing line, thread the closing loop through flap No. 2. and then through flaps Nos. 3 and 4. When closing the container, don't force it. Work gradually and using your knees by placing them on either side of the eye you have threaded the closing loop through. This method prevents the eye from being ripped out of the flap, and helps release air trapped in the canopy bag.

When closing side flaps, use your knees or feet to press flaps.

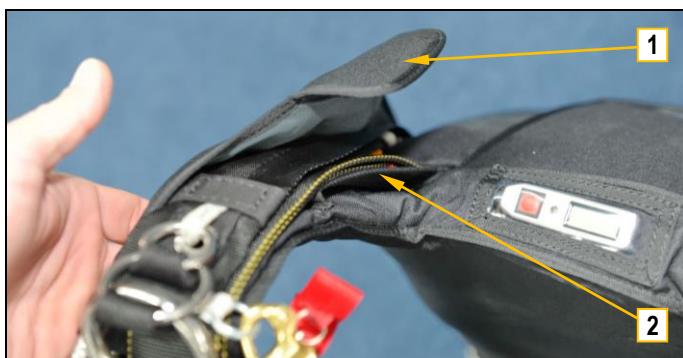
When closing side flaps Nos. 3 and 4, pull the temporary closing line in the direction of the reserve parachute container. This will help place side flaps on reserve parachute container corners.



Fot. 69

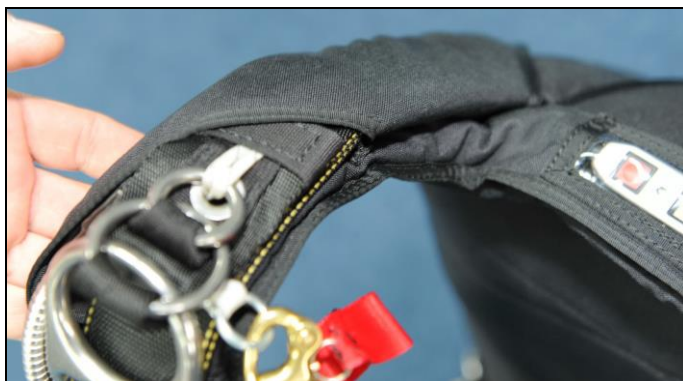
6. Place the curved closing pin in the closing loop along $\frac{3}{4}$ of the closing pin's length making sure that the connecting tape is free of twists.
7. Remove the temporary closing line with a smooth and slow movement making sure that it remains under the closing pin as you do it.
8. Between the closing pin and the part concealed under right-hand side flap No. 3, the connecting tape should have excess length allowing smooth removal of the closing pin from the closing loop.

9. Lead the remaining part of the connecting tape under right-hand side flap No. 3 through to the collapsible pilot chute pouch. The tape should be placed under the flap approximately 5 cm deep, thus preventing its accidental slid-out during the skydive.
10. Check the position of the closing pin and the connecting tape, and close the protective flap of the closing pin by easing its edges under all visible main parachute container closing flaps.
11. Check for any tape sticking out from under flaps.
12. Check the position of risers along the sides of the reserve parachute container. Rear risers with steering toggles should be placed possibly deep, as close to the bottom of the container as possible, with front risers on top. In the shoulder area, risers should rest easily, with no tension or excess slack.



Fot. 70

13. Place flap edges (1) of rear risers under reinforced pouches (2) under reserve container risers.
When closing flaps, tighten the parachute container arms to align them as a natural extension of the reserve parachute container shape.



Fot. 71

14. When all flaps are closed, the suspension lines, steering toggles and main canopy suspension lines should all be concealed under the flaps.
15. Shape the closed container by pressing on it gently with your knees to form the container as appropriate.

5. FOLDING THE HAND-DEPLOYED COLLAPSIBLE PILOT CHUTE



Fot. 72

1. Check the remaining length of the connecting tape, making sure that it has not been threaded through any harness component. It should lead directly and without twists from under the side flap to the collapsible pilot chute.
2. Place the pilot chute next to the container, netting facing upwards.
3. Fold two opposite edges towards the middle of the chute.



Fot. 73

4. Fold one half of the chute over the other.



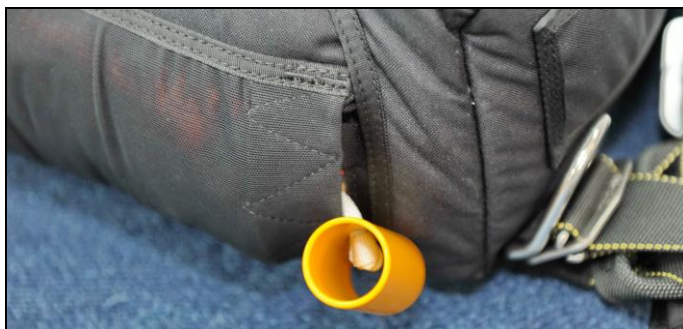
Fot. 74

5. Fold the sides of the chute in three parts towards the middle.
6. Arrange the remaining length of the connecting tape.



Fot. 75

7. Fold the chute again in three parts towards the middle.
After it has been folded, the size of the pilot chute should be the approximate size of the pouch, and as flat as possible..



Fot. 76

8. Place the folded pilot chute in the pouch. Make sure that the connecting tape is well concealed under the container's side flap and in the pilot chute pouch.
9. Flatten the pouched collapsible pilot chute by patting it with your palm or fist to ensure that it does not excessively stretch the pouch.

6. CLOSING THE CANOPY BAG WITH THE STATIC LINE ATTACHED TO THE BAG

Assemble the main parachute following guidelines specified in Section IV item 4 of the Instruction Manual.

Before placing the canopy in the bag check the condition of the rubber stows. They should be of appropriate type, all of the same kind and grade, and undamaged. Replace stows if necessary.

- For "Dacron" lines we recommend the use of rubber stows 4 cm in diameter (~6 cm once the band is folded).
- For Microlines (Spectra, Vectran, HMA, etc.) use rubber stows 2 cm in diameter (~3 cm once the band is folded).



Fot. 77

1. Fold the canopy, the leading edge, and the trailing edge, and determine the position of the slider by following guidelines specified in the owner's manual of the given canopy. The folded parachute canopy should be approximately 5 cm wider than the bag. This allows for the bag to be well filled, resulting in a more favourable bag shape.



Fot. 78

2. Place the folded canopy in the bag.
3. Lead suspension lines centrally out of the bag.
4. Close the bag with the closing flap, threading respective rubber stows through the eyes of the flap. Thread lines through bands starting with those in the middle, following them alternately with bands located on either side at a growing distance from the middle. The length of the line loop created when threading the suspension lines through the bands shall be no less than 5 cm along the outer perimeter.

5. Thread the remaining lines alternately on either side through rubber stows placed along the sides of the bag, leaving an approximate length of 50 cm of unthreaded lines. This will facilitate the process of releasing the bagged parachute from the container, and minimise the threat of a bag twist when suspension lines weave out.
6. Shape the bag and the bagged canopy by gently pressing with your knees. This will also allow the release of air trapped in the canopy and the bag.

7. CLOSING THE MAIN PARACHUTE CONTAINER WITH THE STATIC LINE ATTACHED TO THE BAG

ATTENTION!

Remember to check the closing loop condition. Replace the loop when the threads in its weave begin fraying.



Fot. 79

1. Tie granny knots to attach rubber stows (1) to loops on main parachute container side flaps to allow static line attachment. Use 2" x 3/8" rubber stows for the above. The number of rubber stows to be used shall depend on static line length.



Fot. 80

2. Place the bag – free of twists and turns – with the canopy inside the main parachute container. Place all unthreaded suspension lines – free of entanglement – on the bottom of the container.

The bag may be placed in the container with the suspension lines facing the bottom or back of the container.

3. Tighten and place risers along the reserve parachute container.
Place risers in a way ensuring that the rear riser with the steering toggle is as close to the bottom of the container as possible, with the front riser above.
At that point, risers may be excessively stretched; you will adjust them after having closed the main parachute container.



Fot. 81

4. Fill the container as best you can. You can kneel on the bag, and then, gripping the container flaps, push the bag in as deep as you can. This will also release any air trapped in the bag, which will make closing the container much easier.
5. Pull out the static line (2), tighten it and place it between flaps Nos. 2 and 3. of the main parachute container.
6. Using the temporary closing line, thread the closing loop through the eye of flap No. 2.
When closing the container, don't force it. Work gradually and using your knees by placing them on either side of the eye you have threaded the closing loop through. This method prevents the eye from being ripped out of the flap, and helps release air trapped in the canopy bag.
7. Thread the temporary closing line through the eye of flap No. 3, and thread the closing loop through it.



Fot. 82

8. Thread the temporary closing line through flap No. 4, thread the closing loop through it, and place BOTH closing lines in the loop making sure that the static line is free of twists and turns.
The closing line clasp should not touch the eye of the flap.
The static line placed between the closing pin and the length concealed under flap No. 3 should have enough slack for closing lines to be pulled freely out of the closing loop.
9. Remove the temporary closing line with a smooth and slow movement making sure that it remains between closing lines as you do it. This prevents wear to the closing loop and closing lines, and extends their usable life.

ATTENTION!

Check the closing lines condition before placing them in the closing loop. The yellow casing should be free of cracks and other damage. Closing line damage may cause the blocking of the opening process of the main parachute container.



Fot. 83

10. Check the position of the closing lines and static line slack.
11. Weave the static line into rubber stows, no more than three line folds per band. The length of line loops shall be no less than 5 cm beyond the band. Begin weaving lines in from the right-hand side of the container from the lowest rubber stows upwards.



Fot. 84

12. Close flap No. 5 protecting the closing pin by easing its edges under all visible main parachute container closing flaps.
13. Place the static line carabineer in a pouch on either side of the parachute container.

14. Check the position of risers along the sides of the reserve parachute container. Rear risers with steering toggles should be placed possibly deep, as close to the bottom of the container as possible, with front risers on top. In the shoulder area, risers should rest easily, with no tension or excess slack.
15. Place flap edges of rear risers under reinforced pouches under reserve container risers. When closing flaps, tighten the parachute container arms to align them as a natural extension of the reserve parachute container shape.
16. When all flaps are closed, the suspension lines, steering toggles and main canopy suspension lines should all be concealed under the flaps.
17. Shape the closed container by pressing on it gently with your knees to form the container as appropriate.

SECTION VI

HARNESS FITTING AND ADJUSTMENT

The Feniks parachute harness enables size adjustment. The general description below may serve as clarification of and guidelines to correct harness component assembly and adjustment.

1. ADJUSTMENT SYSTEM DESIGN AND ASSEMBLY



Fot. 85

The adjustment system consists of the following components:

- Main vertical harness strap (1)
- Buckle set on leg straps (2)
- Excess vertical strap casing (3)
- Horizontal (hip) strap (4)
- Tape loop on the leg strap (5)
- Side adjustment buckle (6)



Fot. 86

1. To assemble the vertical adjustment system, thread the main strap (1) through the leg strap buckles (2) from underneath.
2. Thread the main strap through the larger adjustment buckle ONLY.
3. Check the strap threading.



Fot. 87

4. Thread the horizontal strap (4) through the leg strap loop (5).
5. Thread the horizontal strap through the buckle (6) from underneath and around the moving pin, then thread through the buckle again.
6. After having adjusted harness for size, place the vertical strap of the harness on the buckles, wrap it in the casing (3) and fasten with the Velcro strap to the leg strap padding.
7. Thread the free horizontal strap end through the flexible band

2. ADJUSTING THE HARNESS TO THE SKYDIVER'S BODY

The Feniks system harness should be well-fitted to the skydiver's/parachutist's body before every jump, as follows:

- The bottom of the container shall rest at the skydiver's/parachutist's waist level (vertical harness strap adjustment),
- The chest strap shall be placed at chest level or slightly above (vertical harness strap adjustment),
- The hip harness joint shall be placed at hip bone level (vertical harness strap adjustment),
- The container shall rest close to the skydiver's/parachutist's back at waist level (horizontal harness strap adjustment),
- The harness shall be adjusted for symmetry.

ATTENTION!

Excessively long vertical straps may cause the chest strap to move to the skydiver's/parachutist's neck and chin level upon parachute deployment, with difficult steering toggle access.

Excessively short vertical straps may prevent the skydiver from assuming the correct body position in freefall.

When fastening and adjusting the chest and leg straps, remember:

- Thread all straps through buckles correctly,
- The chest strap should not squeeze vertical harness straps inwards,
- Leg straps should be adjusted symmetrically – you should be able to ease a hand under the strap,
- Excess straps should be properly secured to prevent their slide-out and flutter in freefall.

ATTENTION!

Before every jump, make sure that you can reach all handles easily and that you will be able to use them as intended during your skydive. If you cannot reach your handles or if the harness is too big or too small for you, refrain from skydiving.

SECTION VII

IN-AIR AND GROUND PROCEDURES

1. PRE-JUMP INSPECTION/CHECK

Check your parachute system (rig) before every jump.
Use the checklist below (in the proper use/operating order).

Before donning your rig, check the following:

1. General container and harness condition
2. Correct threading of leg straps through buckles
3. Chest strap buckle
4. That the collapsible pilot chute is correctly and firmly placed in the pouch
5. That the collapsible pilot chute's connecting tape is leading directly from the collapsible pilot chute pouch to the closing pin, and that it has been correctly and firmly placed under all flaps
6. That the closing pin has been correctly placed in the closing loop, and the closing loop is neither too short nor too long
7. That the flap protecting the main parachute closing pin has been correctly closed
8. That the main parachute risers and steering toggles are correctly and firmly placed under flaps
9. That the three-ring release system has been properly assembled
10. That the RSL tape has been correctly placed and connected
11. That the cutaway handle has been correctly and firmly placed in its pouch
12. That the reserve parachute deployment handle has been correctly and firmly placed in its pouch
13. That reserve parachute deployment handle cable moves easily in the protective casing
14. The reserve parachute closing pin position
15. The reserve parachute packing date and seal
16. That the Automatic Activation Device of the reserve parachuted has been switched on (if fitted)
17. That the protective flap has been correctly closed

After donning your rig, check the following:

1. That the harness is properly adjusted
2. That leg straps are properly adjusted
3. That the chest strap is properly adjusted and tight around the buckle
4. That you can easily reach all your handles (use simulation should always be performed in the correct operating order)

2. IN-AIR USE

Main parachute deployment with the use of the hand-deployed collapsible pilot chute.

To deploy the main parachute, grip and pull the collapsible pilot chute handle in the direction extending the elongated shape of the collapsible pilot chute pouch, and throw it into the air in the same direction and as far away from your body as possible.

After the canopy inflates check its condition; if the canopy has inflated properly, unstow your steering lines by gripping the steering toggles, and pulling them downwards vigorously and symmetrically.

Main parachute deployment with the use of a static line attached to the aircraft.

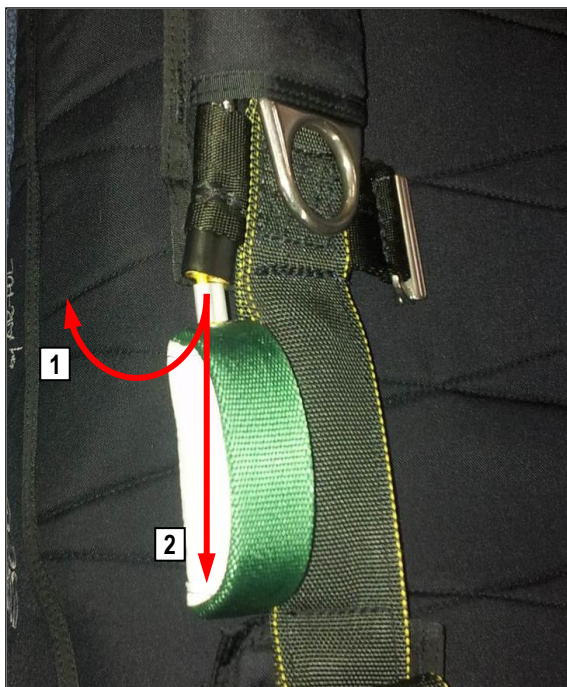
Connect the static line to the point of attachment as specified in the aircraft instruction manual. The point of attachment should be resistant to minimum loads of 600 lb (272.2 kg). The static line length and the point of attachment should be adapted to the given aircraft type.

Main parachute cutaway.

To cut the main parachute away, grip the cutaway handle, rip it from the pouch (1) with a rounded hand movement (away from your body), and pull it downwards along your chest towards the hip until your arm is fully stretched out (2) (Photo No. 88).

Reserve parachute deployment.

Grip the reserve parachute deployment handle, rip it from the pouch (1) with a rounded hand movement (away from your body), and pull it downwards along your chest towards the hip until your arm is fully stretched out (2) (Photo No. 89).



Fot. 88



Fot. 89

ATTENTION!

Pulling handles in a way differing from that shown in the photographs above may result in an increase to the force required to pull them out completely.

3. RECOMMENDED METHOD OF PROCEEDING**Main parachute deployment****Deploy your parachute at altitudes specified by local regulations!**

Before deployment, assume the stable belly position. Grip the collapsible pilot chute handle with your whole hand, pull it in the direction extending the elongated shape of the collapsible pilot chute pouch, and throw it into the air in the same direction and as far away from your body as possible. Releasing the pilot chute close to your body may result in pilot chute hesitation. Upon releasing the pilot chute, resume the stable belly position, keeping your arms parallel to the ground. Avoid holding on to the pilot chute for too long. This may result in a premature main parachute container opening.

After the canopy inflates check its condition; if the canopy has inflated properly, unstow your steering lines by gripping the steering toggles, and pulling them downwards vigorously and symmetrically.

Proceeding in case of malfunctions**CONTROL YOUR ALTITUDE! ACT DECISIVELY AND SWIFTLY!**

If the main parachute has emerged from the container but the canopy did not inflate properly, cut it away using the cutaway handle located on the right main strap of the harness under the chest strap. Try to remain in the stable belly position. Get a visual on the cutaway handle and grip it with one or both hands. Rip it from the pouch (1) with a rounded hand movement (away from your body), and pull it vigorously downwards along your chest towards the hip until your arm is fully stretched out (2), then drop it (Photo No. 88).

Get a visual on and grip the reserve parachute deployment handle with both hands (it is located on the left main strap of the harness under the chest strap). Rip it from the pouch with a rounded hand movement (away from your body), and pull it vigorously downwards along your chest towards the hip until your arm is fully stretched out (Photo No. 89). Resume the stable belly position, keeping your arms parallel to the ground.

ATTENTION!**REMEMBER THAT DEPLOYING YOUR RESERVE PARACHUTE AT A SAFE ALTITUDE IS YOUR PRIORITY!****If altitude does not allow for the main canopy to be cut away, skip the cutaway procedure and deploy the reserve parachute regardless of your body position. NOTE: Do that only if the low altitude does not allow the full procedure to be followed!**

Should the main parachute not emerge from the container (e.g. as in case of the "hard pull" malfunction – the collapsible pilot chute cannot be pulled out of its pouch, or the "pilot chute in tow" malfunction – the pilot chute is out of the pouch, but the container doesn't open) – the main canopy cutaway procedure can be skipped. Remember: in case of the "pilot chute in tow" malfunction, the main parachute may deploy at any time. This is why we recommend cutaway handle use whenever altitude allows it.

After the canopy inflates check its condition, then unstow your steering lines by gripping the steering toggles, and pulling them downwards vigorously and symmetrically.

SECTION VIII

PERIODICAL SERVICING AND REPAIR

1. PERIODICAL MAINTENANCE

- The technical condition of the harness/container shall be assessed by the user before use.
- Parachutes packed as jump-ready systems shall be aired no less frequently than once every six months (180 days).
- Parachutes shall be aired in low-moisture space with no exposure to sunlight.
- Whenever the reserve parachute is (re)packed, the overall technical condition of all components forming part of the harness/container shall be checked in detail.
- The three-ring release system of the main canopy shall be disconnected every three months, with all fabric components "loosened".

2. STORAGE

Materials used in the manufacturing of parachute systems, harnesses/ containers included, are sensitive to the following factors and should be duly protected against them:

- Ultraviolet radiation (sunlight)
- Moisture – radical changes in moisture levels are unacceptable
- Saturation – parachutes shall be dried out prior to packing or storage
- Temperature – the permanent storage temperature of parachute equipment shall range from 5 to 30 degrees Centigrade
- Temporary storage (up to 16 hours) temperatures shall not be lower than minus 40 degrees, or higher than 93 degrees Centigrade
- Sharp-edged objects
- Substances emitting active gases, paint, varnish, fuels and lubricants, acids
- Saltwater – in case of saltwater saturation the harness/container shall be rinsed in clean fresh water and dried out

Furthermore, the following rules shall be conformed to:

- Parachute equipment shall not be wringed out to release water.
- Parachute equipment shall be aired in low-moisture space with no exposure to sunlight.
- No chemicals shall be used to wash parachute equipment.
- Ventilation – parachute equipment storage space shall have ventilation access.
- The relative moisture content in parachute equipment storage space shall range from 30-70%.

3. REPAIRS

- Never repair your own parachute equipment if you are not duly authorised to do so and if you lack appropriate knowledge.
- Should you notice any signs of wear and tear, contact the manufacturer or a duly certified rigger for a maintenance check.
- We recommend that any major repair be performed by the manufacturer.