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Owners Manual for Paragliding Rescue System:

RS 7



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Warning!

This rescue system can not be used as a sport or an emergency parachute for jumping out of an aircraft! It is designed purely for use when encountering an emergency situation while flying a paraglider.

This rescue is tested in accordance with LBA NFL 35/II. The manufacturer is not responsible for any kind of injuries or damages occurring in context with this rescue system.

1. Technical details

Type	RS 7
Weight (kg)	2,2
Decline rate (m/s)	6,5
Area (m ²)	34
Recommended max. load (kg)	114

2. Application

The rescue system is a hand deployed emergency parachute.

3. Service Lifetime

Maximum lifetime: 10 years, with 2 years inspection cycle.

After 10 years another 3 years, with 1 year inspection cycle.

4. Equipment configuration

- Canopy with suspension lines and attachment strap
- Inner container with pull out handle
- Outer container (optional)

5. Documents required

- Owners Manual
- Packing data card

6. Method of deploying the parachute

In an emergency situation during flight, the deployment handle must be pulled strongly to remove the locking pins and to open the container, releasing the packed emergency parachute in it's inner container.

The pilot has to throw the inner bag (using the handle) backwards to the right/left side. When the air flow has fully stretched the lines, the inner bag will open and release the parachute, which starts to inflate.

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7. Inspection of the parachute

It is recommended that the parachute is opened, aired and repacked after being closed for any period of four months.

Before each repack the parachute must be checked by a registered packer. After any emergency deployment the parachute must be checked completely and more carefully for damage, damp or dirt.

Checking is easier, when the parachute is fully out stretched or pulled up with a checking bar.

8. Action with detected damages

If the airworthiness of the canopy is impaired, or it has sustained damage, then it must be returned to the manufacturer for repair.

9. Construction

The parachute canopy has 16 segments. The material is permeable for the air, tear resistant nylon.

The main seams are reinforced. The lines are connected at the skirt with V-flaps, spliced and overstitched on the join. The skirt is both reinforced and quadruple stitched. The apex is pulled in and secured with an elastic cord. The parachute is supplied with a short bridle to connect it to the harness shoulder bridle.

10. Inner container

The inner container is made of tear resistant nylon, with attachment points for deployment handle.

11. Harness container

See harness manufacturer owners manual!

Inspection before each repack:

The apex with the elastic centre cord.

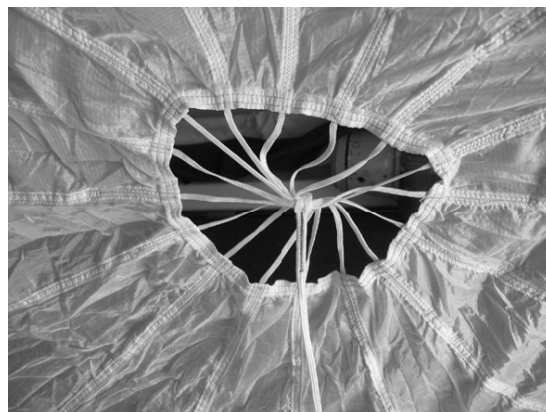


Fig. 1

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Line stitching with bridle for harness connection.



Fig. 2

All sewing of the bridle must be checked.



Fig. 3

All lines must be equal in length.



Fig.4

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12. Laying out and unravelling the canopy

Packing the parachute should take place on a special packing table or a clean flat surface.

The parachute is stretched to its full length on the surface. A long cord is pulled through the packing loops, which are located around the crown of the canopy, on the seams between the gores. The cord is tied off and secured to the upper end of the table.

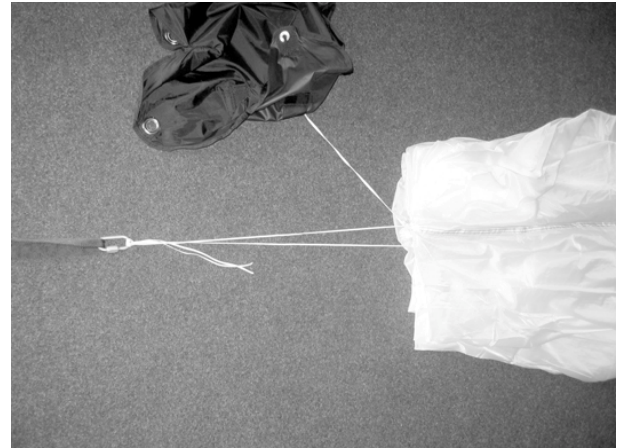


Fig.5

The bridles are fixed to the lower end of the table and the parachute is stretched slightly, which automatically pulls the apex inside the canopy. Check the lines for tangles by taking lines 1 and 16 and tracing them to the bridle. Carefully remove any knots and twists. If desired, you can continue checking each pair of lines, but if these first two lines are in correct order, the rest will also be correct.



Fig. 6

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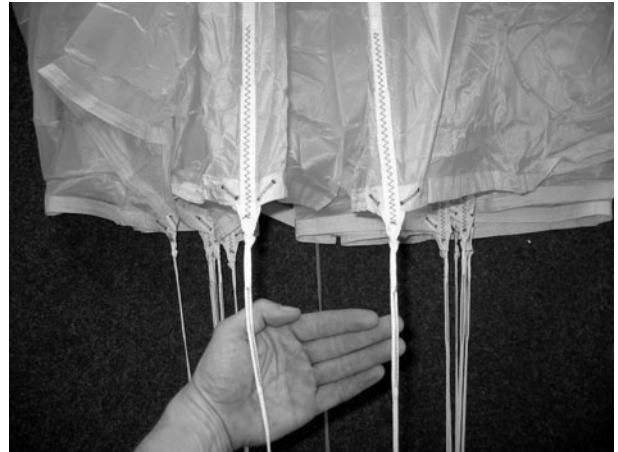
13. Flaking of the parachute

The packer takes hold of segment 1 and counts eight segments - until segment 8 and lays the respective lines together on the right.

He then takes lines 9-16 and places them to the left.

The packer takes gore number 8 and pulls it out to ensure it is lying flat and is not crumpled. This is called flaking the canopy and each gore is treated in turn and arranged on top of each other from 8 to 1.

Fig. 7



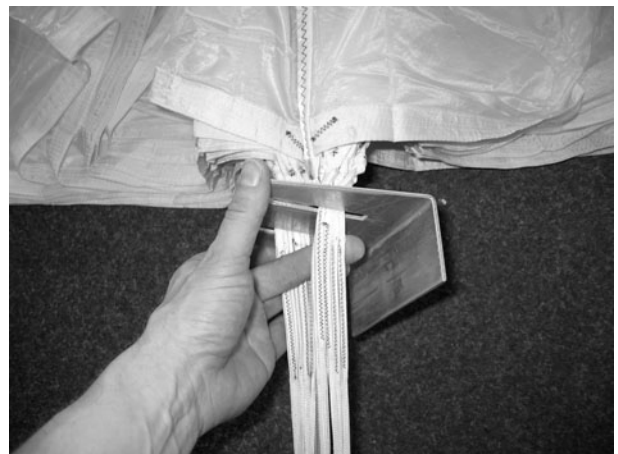
The corresponding lines are between the thumb and index finger of the right hand. The grip is then changed so that the lines 8-1 are between the index and middle fingers. This allows the lines 16-9 to be placed between the thumb and the index finger, while the gores 9-16 are flaked.

Fig. 8



The comb is placed on the lines from above.

Fig.9



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The canopy is placed on the table so that the stamped segment lies on top to the left. The pulled in pack loops are arranged to form a neat apex and each gore is inspected again to ensure that all are flat and free from folds and creases.

Fig. 10



Each side of the canopy is folded in the form of an „S“ so that the lines are together in the centre. To keep the lines lying flat they must be held down with a weight.

Fig. 11



If desired, the inner container can be attached to the canopy.

Fig. 12



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Warning:

It is absolutly vital to ensure that the cords and all tools are removed. If cords are not removed the reserve cannot deploy!

14. Folding the parachute

Release the bridles from the bottom of the packing table. The packer stands behind the upper part of the canopy and places the apex into the inner container.

Make sure that the base of the container is well filled. The fastening flap with the elastic through its eyelet is at top of the canopy.



Fig. 13

The parachute is now folded into the container in consecutive „S“ folds, so that the container is well filled and the mouth of the canopy is on top.

It is very important that there are no knots, twists or tangles in he lines near the mouth of the canopy. The lines are placed on the fastening flap in 3 „S“ forms. The curve on each „S“ is loosely secured using very light rubber bands.



Fig. 14



Fig.15

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15. Closing the inner container

The upper flap with its elastic loop is placed on the packed parachute. The opposite flap, the right flap and finally the left flap are folded around the canopy and the rubber loop is fed through each eyelet in turn.



Fig. 16

The last few centimetres of the lines are formed into a loop and passed through the elastic to close the container, ensuring that there are no knots or tangles inside the closing loop. Carefully tie the container and its contents as neatly as possible.



Fig. 17

16. Closing the outer container

See harness manufacturer owners manual!

17. Entries in the packing data card

Enter details of the packing in the packing data card, including date, name, signature of the packer.

18. General

Rescue systems require particular care and maintenance. It is important always to remember that the life of the pilot may depend on the reliability and airworthiness of the parachute. We also recommend that the pilot practises dummy deployments so as to become familiar with the system and to ensure everything will work correctly. If you have any difficulty understanding the packing instructions, or any doubt as to whether it will deploy satisfactorily, a simulated deployment on the ground will check that you haven't made any mistakes. If you have reservations take the canopy to an accredited Firebird dealer or registered packer.

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19. Packing and inspection dates

We recommend to open, clean, vent and repack the rescue system after 4 month.

Inspection is recommended:

- after 2 years
- after a use of the rescue system
- after a repair or change of the rescue system.

20. Storage

Oils, fats, acids and colours should not be allowed to contact the parachute. The storage should be in a dry place. Parachutes which are not going to be used for a long period should be opened, rolled up loosely and stored in a bag.

21. Cleaning and drying

Dirty chutes and containers can be cleaned with clean fresh water.

After saltwater contact, the rescue system must be cleaned four times with fresh water, then hung up wet in the shade for drying. Acid and spots can reduce the strength of the cloth.

Such systems must be returned to the manufacture for a investigation and repair if possible.

22. Repair

All repairs should be carried out by the manufacturer.



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