

Training Container of the STUDENT 01 Parachute – Technical Specifications

Instructions for Packing and Use No. P – 004 – 01



6 th Edition

In Jevíčko 09/2009

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Note: Technical Conditions of Repairs are available at the Manufacturer or an authorized service place and are not included as a part into these „Instructions for Packing and Use No. P – 004 – 01“.

Chapter V

Removal of Dirt, Washing, Cleaning

WARNING !

1. Training and experience are required to reduce and eliminate the risk of serious or fatal injuries.
A – Never use the equipment unless you have read and understood this warning and have also completed a required training course specified for the use of such equipment.

Or

B – Unless you have read and understood all the relevant flight manuals and instructions for packing and you have performed at least 100 jumps.

2 . In order to reduce and eliminate the risk of death, a serious injury, destruction or damage of the canopy, it is strongly recommended not to exceed the following limits:

MAXIMUM EXIT SPEED	240 km/hours / 130 KNOTS
MAXIMUM LOAD WEIGHT (of the parachutists + gear + equipment)	115 kg / 253 lb
MODEL/TYPE	OP-093/01 / PS-034 S
NO. OF PART	
SERIES	
DATE OF PRODUCTION	

This parachute has been approved according to TSO C 23 d.

MarS a.s.
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THE CZECH REPUBLIC

List of Changes

In case of the necessity to change or amend this manual, the holder will be notified by means of bulletins with enclosed new (corrected) sheets. The holder of the manual is obliged to record any notified and obtained changes into the List of Changes and replace out-of-date sheets with valid sheets. Changed or amended parts of the manual will be marked with a vertical line on sides and they will further be marked with the number of the change and the date of the issued change on the bottom of the page.

Sequence No. of the Change	Chapter	Nos. of Sheets with Changes	Issue Date of New Sheets	No. of the Bulletin with Issued Change	Approval Date of the Bulletin	Date of Execution Signature

Chapter I

1. Use and Purpose of the Container with the Harness

The STUDENT 01 Container with the harness is designed for a basic training of parachutists, possibly for recreational jumps.

It enables a tandem arrangement of canopies of reserve and main parachutes.

2. Tactical and Technical Parameters

2.1. Basic and Functional Parameters

- The weight of the container with the harness is 3.2 kg.

Limitations:

- Permitted flight speed during an immediate opening from 90 to 240 km/h
- Permitted flight speed for jumps with an attached deployment bag from 90 to 140 km/h
- Permitted flight speed for jumps with a stabilization fall from 90 to 180 km/h
- Permitted flight speed for jumps with an attached pilote chute from 90 to 140 km/h
- permitted altitude of opening from 300 to 4000 mT

3. Reliability Parameteres

3.1. Warranty Period

- a) Lasts 24 months on condition that repairs and replacements of used parts are carried out, storage conditions are maintained and regular inspections are performed.
- b) Begins with the date of the shipment of the parachute container, on condition that the shipment must take place no longer than 24 months after the production date.
- c) During the warranty period the manufacturer will not accept claims in the following cases:
 - damage of the parachute container while a reliable function of the product remains unaffected
 - damage of any part of the parachute container due to being caught by the equipment
 - violation of conditions of packing, storage and maintenance of the parachute container by the user
 - missing parachute log book or improper recording in the parachute log book

3.2. Complete Overhaul

- is performed after 5 years, while the user is obliged to assure necessary repairs and replacements of damaged parts during that period.
- only parachute containers that were classified by the manufacturer or a representative of the user as not suitable for further use will be accepted for a complete overhaul.

3.3. Service Life of the Container of the Parachute

The total service life of the STUDENT 01 container is set to 15 years since the production date in maximum. It is, however, necessary to meet the following conditions:

- a) After 5 years the user is obliged to send the parachute to the manufacturer or a representative of the user for an inspection of the technical condition. The container is declared as suitable for further use only for one (1) year. Technical inspections must be performed every year.
- b) Performed repairs correspond to technical conditions of repairs.
- c) Prolongation of the service life must be recorded in the parachute log book by an authorized and responsible body.

4. The Set of the Container

4.1. Harness	PS-034 S	1 piece
4.2. Container of the Parachute	OP-093/01	1 piece
4.3. Cutaway Release	U-053	1 piece
4.4. Release of the Main Parachute (STUDENT 01 – trainer)	U-066	1 piece
4.5. Release of the Reserve Parachute	U-051	1 piece
4.6. Release of the Main Parachute (STUDENT 01 – trainee)	U - 065	1 piece
4.7. Release of the Main Parachute (stabilization – trainee)	U-067	1 piece
4.8. Static Line	VL-025 L	1 piece
4.9. Connecting Line (with a stainless snap hook)	SŠ- 058 a	1 piece

5. Specifications of the Main Parts of the Container

The OP-093/01 Parachute Container (fig. 1)

- both main and reserve parachutes are folded in the parachute container that is of a trapezium shape and is made of polyamide fabric. After the back pad, the pack of the main parachute and the pack of the reserve parachute are sewn together, they form one unit.

The pack of the main parachute consists of: the bottom (4), left side flap (5), right side flap (6) and bottom flap (7). A closing line (8) of the main parachute container is placed on the bottom flap.

The hose of the main parachute release is sewn on the right side flap of the main parachute. Passes (11) that serve for the attachment of the static line are sewn on both flaps of the main parachute.

The pocket of the stabilization parachute (12) and the pocket of the pilot chute (21) are sewn on the bottom flap of the main parachute.

The pack of the reserve parachute consists of:

The main part (13) that passes into the left (14) and right (15) side flaps. A top inside flap (16) and a top outside flap (17) are sewn on the main part at the top. A bottom inside flap (18) and a bottom outside flap (19) are sewn on the bottom part. There is an exchangeable transparent perspex window placed in the top outside flap. The closing line of the reserve parachute is fitted to the bottom of the reserve parachute. There is a webbing stitched on the right side of the pack and serves for the attachment of the snap hook of the static line on the parachute packed and ready for jumps.

Cutaway hoses are attached to the right shoulder pad. The hose of the reserve parachute cable is attached to the left shoulder pad. This hose goes up to the left main strap of the supporting harness.

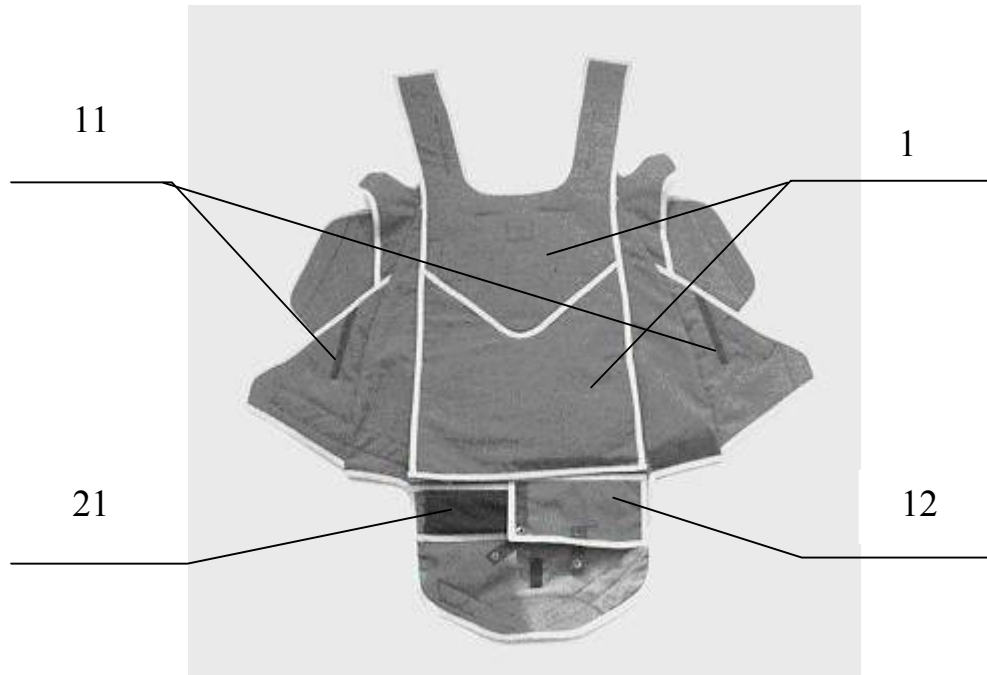


figure 1a

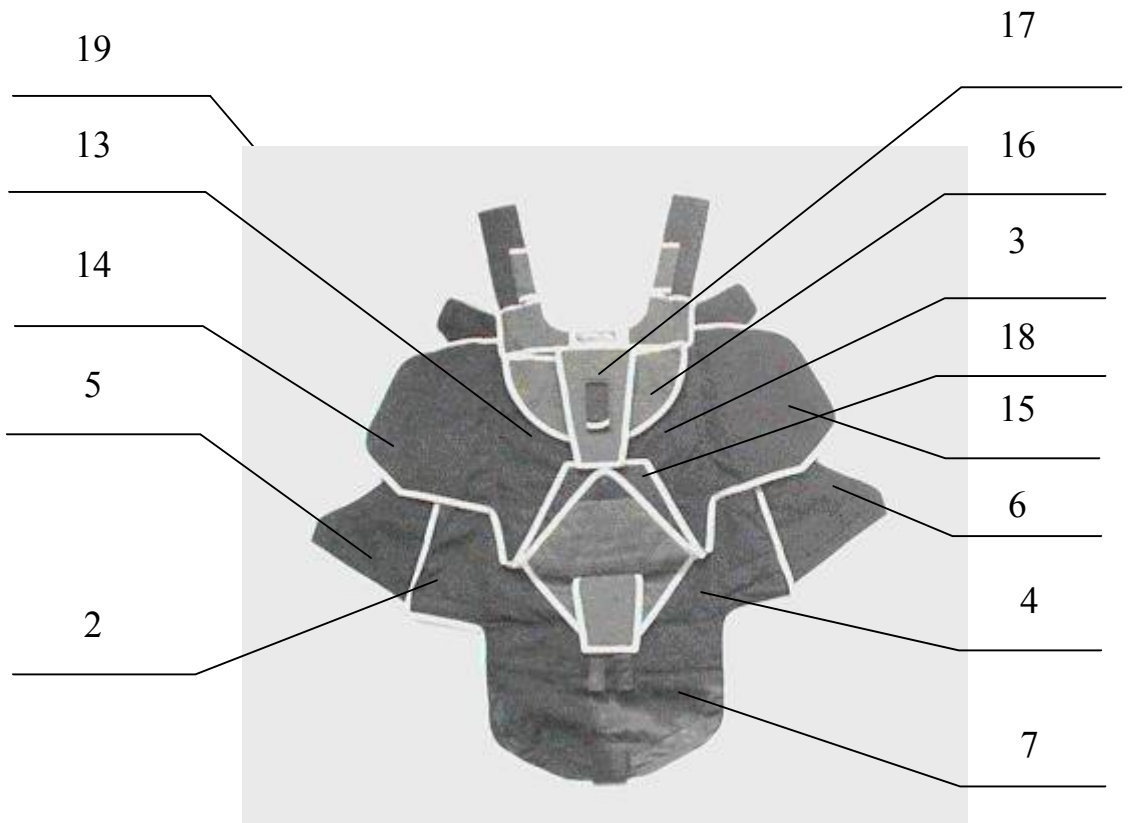


figure 1b

The PS - 034 S Supporting Harness (fig. 2)

The supporting harness is made of a polyamide strap with the minimal strength of 15,000 N and is designed for the attachment of the container of parachutes of tandem arrangement to the body of the parachutist.

The supporting harness consists of main straps (1) that pass into leg straps (2), the chest strap (3a, b), back straps (4) and the lumbar strap (5). The main strap is divided by a buckle (6) for the control and regulation of the size of the harness. The main strap is doubled and divides into two parts above the cutaway ring, that is 44 mm large. The fork that is created by the division of the strap forms free ends with loops for the attachment of the reserve parachute.

Pads are sewn on leg straps.

A pocket for placing the release of the reserve parachute is sewn on the right main strap. Pockets for the cutaway release as well as for the main parachute release are sewn on the left main strap.

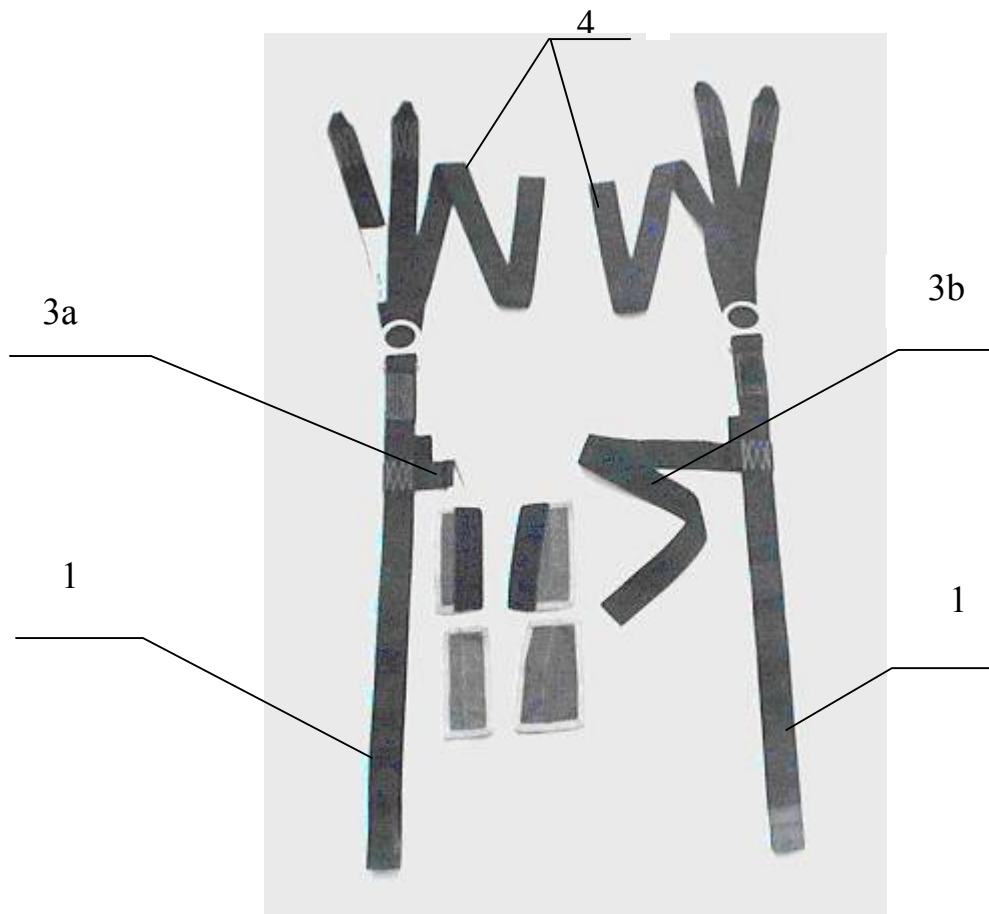


figure 2a

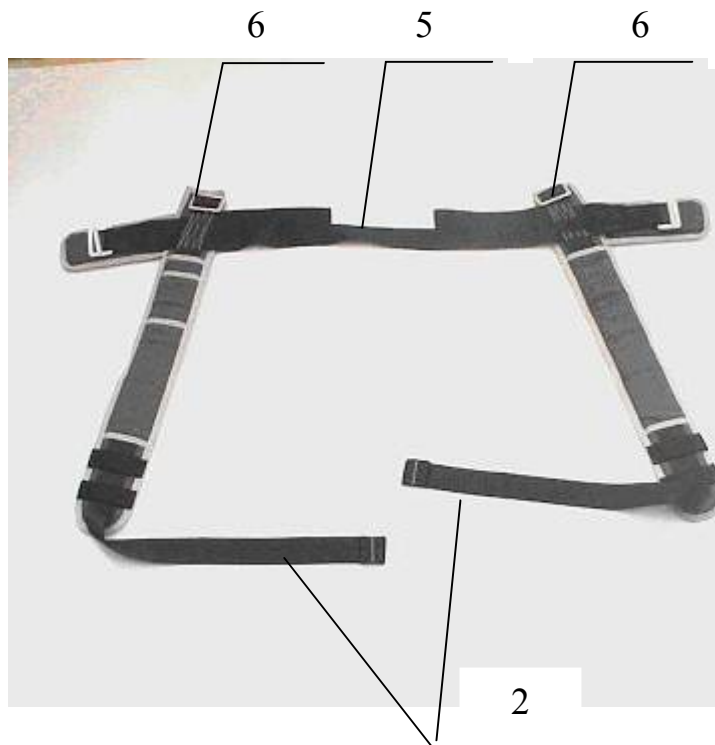


figure 2b

The U – 065 Release of the Main Parachute (Student 01 – trainee)

The release is designed for the opening of the pack of the main parachute. It consists of a pipe handle and plastic coated cable.



figure 3a

The U – 067 Release of the Main Parachute of the Stabilization (Student 01 – trainee)

The release is mainly used as a release of the main parachute of the STUDENT 01 container part for jumps known as „stabilization“. It is also possible to use it as a replacement for the U – 065 type. It is placed on the leg strap in such a way that it prevents a possible misholding of the release and confusing this release with the U – 053 cutaway release in a maximum possible way.

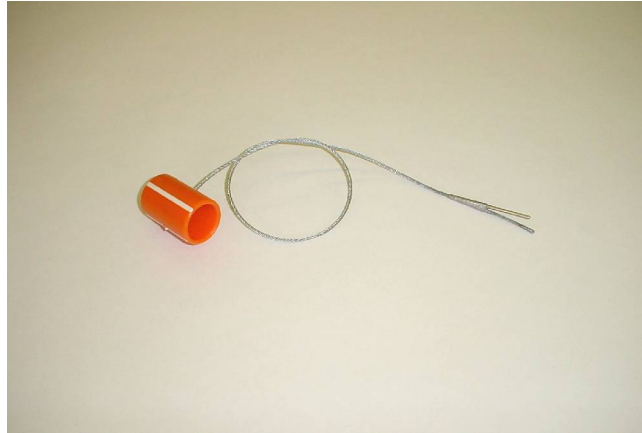


figure 3b

The U – 051 Release of the Reserve Parachute (fig. 4)

The release is designed for the opening of the pack of the reserve parachute. It consists of a trapezium-shaped steel handle, cable with a needle and stops at the ends.



figure 4

a) The U – 066 a Release of the Main Parachute (Student 01 – trainer)

The release is designed for the opening of the pack of the main parachute (by the trainer during the AFF training). This release handle is the same as the handle of the cutaway release. A plastic coated steel cable leads out of the handle.

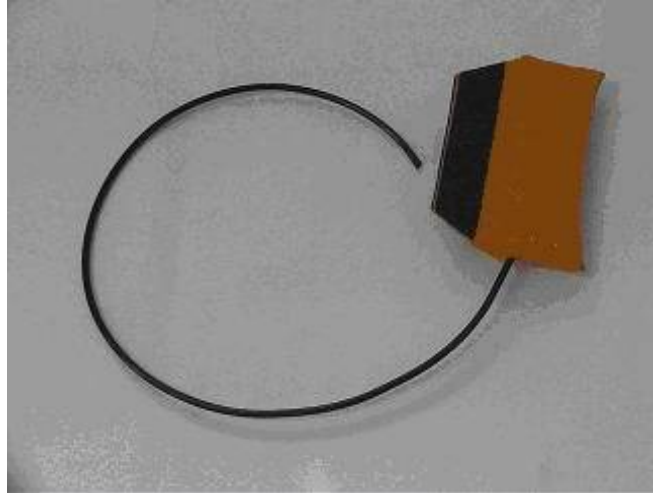


figure 5 a

b) The U – 066 b Release of the Main Parachute (Student 01 – trainee)

A webbing with a Velcro adhesive tape leads out of the handle. The webbing is equipped with a loop at the end that is put on the U – 065 cable.



figure 5b

The SŠ – 058a Release Line

This line is designed for an automatic opening of the container part of the reserve parachute (see specifications in the manual P – 003 – 99).

The VL – 025 L Static Line (fig. 6)

The line is designed for the opening of the main parachute pack and a forced sliding of the deployment bag or of the stabilizer bag off the stabilization parachute canopy. The static line is made of a PAD tubular line of the minimal strength of 11,800N. A snap hook is sewn on one end and a loop on the other end. There is a plastic coated release cable sewn on a place 500mm from the end with the loop. The total length of the line is 2,900 mm.



figure 6

CAUTION!

In case of using the VL – 025 L static line, it is required to check the length of the extended system, i.e. the static line and container. The static line with the container must not in any case limit or endanger control functions of aircrafts that will be used for airdrops.

6. Functions of the Container

6.1. Jumps with an Attached Container (Deployment Bag)

After the parachutist's exit out of the aircraft with legs forward (this way is called „a soldier“) and extension of the static line anchored inside an aircraft, the needle of the static line opens the main parachute pack. Then the canopy that is folded in the container (deployment bag) is taken out of the container. The container is attached to the static line.

6.2. Jumps - Stabilized Fall

After the exit out of the aircraft with legs forward (this way is called „a soldier“) and extension of the static line, the static line anchored with a snap hook at one side in the aircraft becomes unlaced from the passes on the parachute container. After it is extended in full length, the stabilization parachute is withdrawn from the container attached at the end of the line. After the stabilization parachute is inflated and the connecting webbing is extended, the parachutist becomes stabilized in a position slightly leant forward. After holding time, the parachutist pulls the release of the main parachute out.

After lines are extended in full length, the container is slid off the canopy and the canopy cells are gradually filled up with air.

6.3. Freefalls with a Manual Opening

After the exit out of the aircraft and after 3 seconds in minimum, the parachutist pulls the release of the main parachute out.

Then the parachute container opens and the pilot chute pulls the container with a folded canopy out of the container.

Suspension lines become unlaced from rubber loops of the container and the closing flap of the container is released.

After the lines are extended in full length, the container is slid off the canopy and cells of the canopy are gradually filled up with air.

6.4. Jumps with an Attached PV – 006 Pilot Chute

After the parachutist's exit out of the aircraft with legs forward (this way is called „a soldier“) and extension of the static line anchored inside an aircraft, the needle opens the parachute container. Then the PV – 006 pilot chute is taken out of the container. The pilot chute is tied to the stem at the end of the static line and to the deployment bag with the canopy. After the system is extended, the tearing-off line with the strength of 500 N is torn up, the container is slid off the canopy and cells of the canopy are gradually filled up with air.

Chapter II

Instructions for the Packing of the Container

1.1. General Instructions

- a) Before packing the parachute, it is necessary to check the entirety and technical condition of the parachute. Damaged parts are either exchanged or repaired.
- b) During the packing, it is not recommended to expose the parachute to direct sunlight.
- c) The parachute is packed by one person.
- d) The STUDENT 01 Container is used as a set with the following canopies: PZS-92 Witty Plus, M 291, M330 Z manufactured by the company MarS, possibly with other types of canopies based on the agreement of the manufacturer and the testing office of AeČR (Aero Club of Czech Republic).
- e) Any adjustment of the parachute container is not acceptable without the consent of the manufacturer.

1.2. Inspection of the Container before Use

Parts of the container are checked in the following order:

Harness	PS-034 S
Container of the parachute	OP-093/01
Cutaway release	U-053
Release of the main parachute	U-066
Release of the main parachute (stabilization – trainee)	U-067
Release of the reserve parachute	U-051
Release of the main parachute	U-065
Static line	VL-025 L
Connecting line	SŠ- 058 a

The above mentioned parts are to be checked whether they are are not damaged, sewing, fabric, webbings and straps are complete and not damaged either.

An emphasis is put on a careful inspection of metal parts as follows:

- Releases (metal bushings) that must not have any apparent fracture, fraying with sharp edges, breaks nor any other damage.
- The cutaway release, which is coated with plastic material, must not have its surface damaged, ends must lead out of cutaway hoses with the same length that must reach 120 mm in minimum.
- The SŠ – 058a release line and closing lines (of main and reserve parachutes) must not be damaged and must be in perfect entirety.
- Hoses of releases must not be damaged.

1.3. Removal of Faults of the Container / TroubleShooting

- a) Removal of faults is carried out by an exchange of damaged parts or a repair according to instructions stated in „Technical Conditions of Repairs“/“Technické podmínky oprav“
- b) Parts that are permitted to be exchanged:
 - Release of the main parachute U-066
 - Release of the main parachute U-065
 - Release of the main parachute U-067
 - Release of the reserve parachute U-051
 - Cutaway release U-053
 - Static line VL-025 L
 - Connecting line SŠ-058a

1.4. Guidelines for Replacement (Assembly) of Parachute Parts

- a) Use, assembly and disassembly of the automatic opening of the reserve parachute (AOZP) is carried out according to the P – 003 – 99 technical specifications.
- b) Replacement of the closing line of the main parachute.



figure 7a

Otherwise a usual type of a closing line with a washer is used.



figure 7b

c) Replacement of the closing line of the reserve parachute (see fig. 8a,b)



figure 8a



figure 8b

d) Attachment of the container to the static line

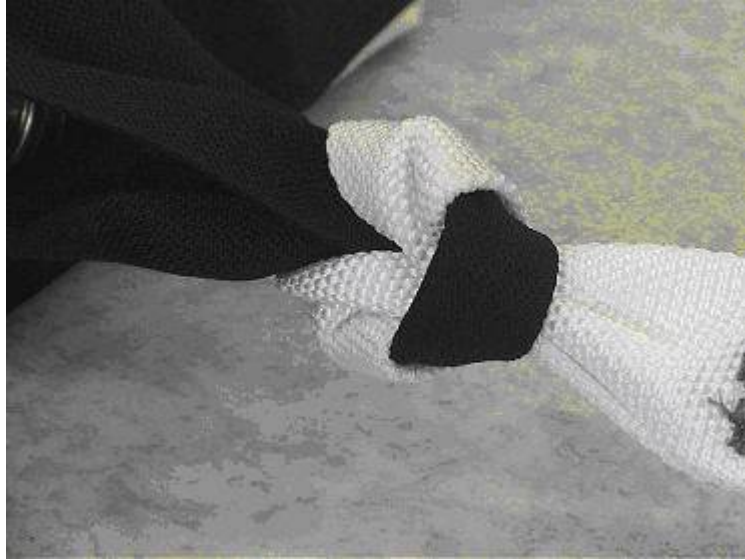


figure 9

e) Attachment of the stabilizer bag (PZ-015) to the static line – see fig. 10



figure 10

- f) Attachment of the ST – 015 stabilization parachute to the container and connecting line – see fig. 11



figure 11

- g) Attachment of the pilot chute (PV – 006) to the container and canopy – see fig. 12



figure 12

1.5. Packing Aids

No special aids are needed for the packing of the parachute. The BS-11 packing set can be used, or the PST-003 field packing table.

2. Packing of the Reserve Parachute

The packing of the PZS-92 reserve parachute into the OP-093/01 pack is described in details in the PZS-92 no. P-003-93 Technical Specifications of the Reserve Parachute.

The packing of the type wing Witty Plus reserve parachute is described in the Technical Specifications TP no. P – 011 – 96.

3. Packing of the Main Parachute

The packing of the M 291 (M 330 Z) main parachute canopy is described in details in the manual with instructions for packing and use no. P-001-96 up to the phase of folding and packing of the canopy into the container including lines. Further folding and packing into the STUDENT 01 container continues according to the type of jumps:

- 3.1. jumps with an attached container (deployment bag)
- 3.2. jumps - stabilized freefalls
- 3.3. jumps - freefalls with a manual opening
- 3.4. jumps with an attached pilot chute

Chapter III

Instructions for the Use and Maintenance of the Container with the Harness

1. Preparation of the Parachute before Jumps

The container of the parachute is folded and packed according to the description of packing specified in Chapter II, paragraphs 2 and 3. It is expected that the M 291 (M330 Z) canopy will be used together with the PZS-92 (Witty Plus) reserve parachute.

Before the parachute is put on, fastening buckles on the supporting harness are loosened as well as the buckles running out of the back strap.

Take the parachute and put it on by pulling through hands under shoulder straps. Then straighten up and close the chest strap and leg straps. Tighten them so that the parachute is tightly fitted to the body. The size of the harness can be regulated with buckles on the main strap. It is required to keep the same length on both left and right sides. Remaining and overhanging strap is placed under the cover with a Velcro adhesive tape on the leg pad.

Before boarding the aircraft, it is necessary to check the following:

- proper insertion of the release cable (of the needle) of the main parachute
- proper connection
- proper insertion of the release needle into the reserve parachute
- proper connection of free ends with the supporting harness (a three-ring system) and the intactness of the line eye
- intactness of cables of the cutaway release
- proper tightening of buckles of the supporting harness
- complete fitting into the parachute
- proper function of a safety device (MPAAD, CYPRES, ASTRA FXC)

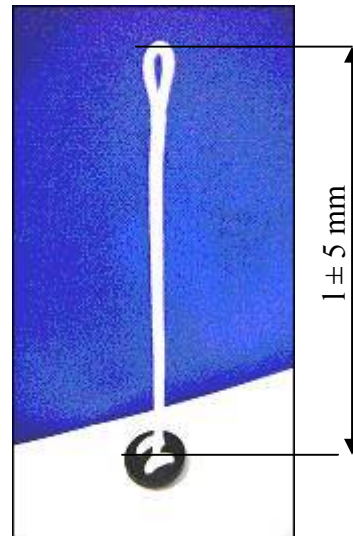
2. Jumps with the STUDENT 01 Training Container

The container is folded and packed for use in four basic ways:

- 2.1. for jumps with an attached container (deployment bag)
- 2.2. for jumps - stabilized freefalls
- 2.3. for jumps – freefalls with a manual opening
- 2.4. for jumps with an attached pilot chute

Length of the reserve parachute closing line

OP-093/01	Reserve Parachute PZS-92	Reserve Parachute WP-210
Size of container		
AAD	MPAAD	
1	110 ± 5 mm	95 ± 5 mm
2	110 ± 5 mm	95 ± 5 mm

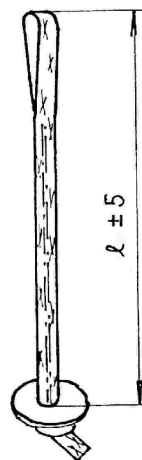


The length of the main parachute closing line from the knot is 35 ± 5 mm in maximum.

Packing of the Container for a Stabilized Fall

CAUTION!

The length of the closing line from the knot is 25 ± 5 mm in maximum for such a type of jumps. In case of a longer closing line, there is a danger of an early untimely opening of the main parachute.



2.1. Packing of the Parachute for Jumps with an Attached Container (Deployment Bag)

During jumps with an attached container (deployment bag), the parachutist jumps out of the aircraft in a manner called „soldier“. After the extension of the static line, the needle sewn on 50cm from the end of the static line opens the parachute container and withdraws the deployment bag with the canopy and lines. The lines become gradually unlaced from the container passes and the canopy begins to fill up. Further activities of the parachutist after the canopy is filled up with air are described in the Technical Specifications of the canopy of the M 291 (M 330 Z) TP-003/96 training parachute.

Solving of special cases is described in the V-PARA-1 methodology of the Aero Club of Czech Republic (AeČR).

The complete parachute set packed for jumps - 2.1.

- Harness	PS-034 S	1 piece
- Container of the Parachute	OP-093/01	1 piece
- Cutaway Release	U-053	1 piece
- Release of the Reserve Parachute	U-051	1 piece
- Release Line	SŠ-058a	1 pair
- The PZS-92 Reserve Parachute	V-076-1	1 piece
- Connecting Line	SŠ-043	1 piece
- Pilot Chute	PV-028	1 piece
(with a central line for AAD CYPRES, VIGIL)		
or		
- Pilot Chute	PV-038	1 piece
(with a central line for AAD MPAAD)		
- Static Line	VL-025 L	1 piece
- Container	VV-041/3 NL	1 piece
- The M 291 Canopy	V-095-1	1 piece

In case the Witty Plus reserve parachute is used, the set must be complemented as follows:

- Witty Plus	V – 089	1 piece
- Deployment bag	VV - 050	1 piece
- Steering loops	ŘP – 006 (007)	1 pair

Then the PZS-92 reserve parachute and SŠ-043 connecting line are not used.

2.1.2. Packing of the Container with an Attached Deployment Bag

The container (deployment bag) with a folded and packed canopy and suspension lines is placed into the main parachute pack with lines put on the bottom while the bottom edge of the closed deployment bag is put near the bottom of the reserve parachute pack. There is a folding of the bottom part of the main parachute pack made in the left corner. There the bag is folded and is led to the bottom of the reserve parachute. Then it is folded again and led to the right bottom corner of the main parachute pack. The last (third) folding is finished in the centre of the pack at the bottom of the reserve parachute. The VL-025 L static line leading from the attachment of the deployment bag goes from the left side across the central flap. First the bottom and top flaps of the main parachute are fastened as well as both side flaps (in the following order: first the left flap, then the right one). The needle of the static line is pulled through the eye of the closing line. The static line is folded into rubber passes on side flaps of the main parachute. The snap hook of the static line is hung into the pass sewn on the top part of the right side of the parachute container.

A view of the packed container part - see fig. 13 a, b and c.

2.2. Packing of the Parachute for Jumps - Stabilized Freefalls

During jumps with stabilized freefalls, the end of the static line with a snap hook is anchored in an aircraft. The bag of the stabilization parachute is attached at the other end of the static line.

After the line is extended in full length, the stabilization parachute is taken out of the bag. Due to air flow, the stabilization parachute is filled up and it stabilizes the parachutist in a slightly leant forward position. After holding time the parachutist opens the pack of the main parachute with the U-066 main parachute release. The stabilizer functions as the pilot chute at this moment and withdraws the deployment bag with the canopy and lines from the pack. The lines become gradually unlaced from the container passes and the canopy begins to fill up. Further activities of the parachutist after the canopy is filled up with air are described in the Technical Specifications of the canopy of the M 291 (M330 Z) (TP-003/96) training parachute.

The complete parachute set packed for jumps – 2.2.

- Harness	PS-034 S	1 piece
- Container of the Parachute	OP-093/01	1 piece
- Cutaway Release	U-053	1 piece
- Release of the Reserve Parachute	U-051	1 piece
- Release Line	SŠ-058a	1 pair
- The PZS-92 Reserve Parachute	V-076-1	1 piece
- Connecting Line	SŠ-043	1 piece
- Pilot Chute	PV-028	1 piece
(with a central line for AAD CYPRES, VIGIL)		
or		
- Pilot Chute	PV-038	1 piece
(with a central line for AAD MPAAD)		
- Static Line	VL-025 L	1 piece
- Container	VV-041/3 NL	1 piece
- The M 291 Canopy	V-095-1	1 piece
- Release of the Main Parachute	U-067	1 piece

In case the Witty Plus reserve parachute is used, the set must be complemented as follows:

- Witty Plus	V – 089	1 piece
- Deployment bag	VV - 050	1 piece
- Steering Loops	ŘP – 006 (007)	1 pair

Then the PZS – 92 reserve parachute and the SŠ – 043 connecting line are not used.

2.2.1. Packing of the Container for a Stabilized Fall

The deployment bag with a folded and packed canopy and suspension lines placed in spring loops is put into the main parachute pack, with lines in the bottom part of the pack, i.e. in the direction leading from the space of the reserve parachute.

Free ends of the supporting harness are placed between the reserve parachute and cover flap. The closing line of the main parachute is drawn through the bottom part of the central flap. A connecting webbing of the stabilization parachute leading from the attachment of the canopy to the container (deployment bag) goes from the left side across the central flap.

Then the main parachute side flaps are fastened (in the following order: first the left flap, then the right one). The ring of the connecting webbing of the stabilizer is put on the closing line of the main parachute pack. Then the needle of the main parachute release is drawn through the closing line, and the stabilization parachute is folded and placed into the bag of the PZ-015 stabilizer, to which the static line is attached.

The connecting webbing of the stabilizer is extended and fastened with a Velcro adhesive tape on the bottom flap of the main parachute. The stabilizer bag with the stabilization parachute is put into the pocket of the stabilizer that is sewn on the bottom flap of the main parachute. A knot tightening the static line and the stabilizer is tied up with a tearing-off line, further it is drawn through metal bushings in the webbing and pocket of the stabilizer.

The static line is led from the attachment through rubber passes of the side flaps of the main parachute. The snap hook of the static line is hung into the pass sewn on the side of the main parachute.

CAUTION!

The length of the closing line from the knot is 25 ± 5 mm in maximum for such a type of jumps. In case of a longer closing line, there is a danger of an early untimely opening of the main parachute.

A view of the packed container part - see fig. 14 a and b.

2.3. Packing of the Parachute for Jumps – Freefalls with a Manual Opening

During freefalls with a manual opening of the main parachute, after holding time and the freefall the parachutist opens the main parachute pack with the U-066 release of the main parachute. Due to air force, the PV-006 pilot chute pulls the deployment bag together with the canopy and lines out of the parachute container. The lines gradually become unlaced from the passes of the container and the canopy fills up. Further activities of the parachutist after the canopy is filled up with air are described in Technical Specifications of the canopy of the M 291 (M330) (TP-003/96) training parachute.

The complete parachute set packed for jumps – 2.3.

- Harness	PS-034 S	1 piece
- Container of the Parachute	OP-093/01	1 piece
- Cutaway Release	U-053	1 piece
- Release of the Reserve Parachute	U-051	1 piece
- Release Line	SŠ-058a	1 pair
- The PZS-92 Reserve Parachute	V-076-1	1 piece
- Connecting Line	SŠ-043	2 pcs
- Pilot Chute	PV-028	1 piece
(with a central line for AAD CYPRES, VIGIL)		
or		
- Pilot Chute	PV-038	1 piece
(with a central line for AAD MPAAD)		
- Static Line	VL-025 L	1 piece
- Container	VV-041/3 NL	1 piece
- The M 291 Canopy	V-095-1	1 piece

In case the Witty Plus reserve parachute is used, it is necessary to complement the set as follows:

- Witty Plus	V – 089	1 piece
- Deployment Bag	VV-050	1 piece
- Steering Loops	ŘP – 006 (007)	1 pair

Then the PZS – 92 reserve parachute and the SŠ – 043 connecting line are not used.

2.3.1. Packing of the Container for Freefalls with a Manual Opening

The container (deployment bag) with a folded and packed canopy and suspension lines placed in spring loops are put into the main parachute pack with lines in the bottom part of the pack, i.e. in the direction leading from the reserve parachute space.

Free ends of the supporting harness are placed between the reserve parachute and cover flap. The closing line of the main parachute is drawn through the bottom part of the central flap, under which the spring of the pilot chute is pressed and side flaps of the main parachute are fastened (in the following order: first the left flap, then the right one). The needle of the main parachute release is pulled through the eye of the closing line.

2.4. Packing of the Parachute for Jumps with an Attached Pilot Chute

During jumps with an attached pilot chute, the needle of the extended static line opens the pack of the main parachute. The container (deployment bag) with the canopy is extended. The lines gradually become unlaced from spring loops. After suspension lines are extended, the canopy is taken out of the container (bag). All the cells of the canopy are gradually filled up with air. Further activities of the parachutist after the canopy is filled up with air are described in Technical Specifications of the canopy of the M 291 (M330 Z) (TP-003/96) training parachute.

The complete parachute set packed for jumps – 2.4.

- Harness	PS-034 S	1 piece
- Container of the Parachute	OP-093/01	1 piece
- Cutaway Release	U-053	1 piece
- Release of the Reserve Parachute	U-051	1 piece
- Release Line	SŠ-058a	1 pair
- The PZS-92 Reserve Parachute	V-076-1	1 piece
- Connecting Line	SŠ-043	1 piece
- Pilot Chute	PV-028	1 piece
(with a central line for AAD CYPRES, VIGIL)		
or		
- Pilot Chute	PV-038	1 piece
(with a central line for AAD MPAAD)		
- Static Line	VL-025 L	1 piece
- Container	VV-041/3 NL	1 piece
- The M 291 Canopy	V-095-1	1 piece
- Pilot Chute	PV-006	1 piece

In case the Witty Plus reserve parachute is used, it is necessary to complement the set as follows:

- Witty Plus	V – 089	1 piece
- Deployment Bag		1 piece
- Steering Loops	ŘP – 006 (007)	1 pair

Then the PZS – 92 reserve parachute and the SŠ – 043 connecting line are not used.

2.4.1. Packing of the Container for Jumps with an Attached Pilot Chute

The deployment bag is placed on the bottom of the main parachute pack with lines in the bottom part of the pack. The knot of the canopy and the connecting line are then placed near the bottom of the reserve parachute. Then the connecting line is folded on the deployment bag. Before this step, the attachment of the tearing-off line with the strength of 450 ± 50 N is carried out (this strength can be the result of summing smaller strengths of several tearing-off lines). The attachment is led through the loops of the SŠ-043 connecting line, the PV-006 pilot chute and the static line. The VL-025 L static line leading from the attachment goes from the left side across the central flap. First the bottom and top flaps of the main parachute are fastened as well as side flaps of the parachute (in the following order: first the left flap, then the right one). The needle of the static line is drawn through the eye of the closing line. The static line is folded into rubber passes on side parts of the main parachute. The snap hook of the static line is hung into the pass sewn on the top part of the right side of the parachute container. A view of the packed container part - see the fig. 13 a and b.

3. Inspection and Folding of the Parachute Container after Jumps

After performed jumps, the dirt on the container with the harness is removed. Then it is placed into a portable bag so that metal parts of the harness do not remain in direct contact with an unfolded canopy, i.e. it is placed with buckles to the side of the bag.

4. Storage

Before the container is stored, its inspection must be carried out, if necessary its repair, replacement of damaged parts as well as airing. The container is stored inside a portable bag either packed or unpacked. An unfolded and unpacked canopy is straightened by fields, the left part is folded over the right part and the canopy is rolled up from the top to the bottom. Suspension lines are chain braided. The container is placed into a portable bag so that the flap of the parachute container with the key identification number remains up. The parachute log book is put into the portable bag pocket.

The parachute container is stored in shelves in a dry, dark and well-aired room. The distance between the bottom shelf and the floor must be 150 mm in minimum, the distance between the shelf and walls must be 500 mm in minimum, and the distance between shelves and heating must be at least 1,000 mm. If the parachute is stored for a longer period, it must be aired for 24 hours every 6 months. The parachute is aired in the shade. The container cannot be exposed to sunlight.

It is forbidden to store any metal objects that do not belong to parachutes, any oils, acids, solvents or any other aggressive substances in premises where parachutes are stored.

The following climatic conditions must be fulfilled in storage premises:

- daily temperaturebetween +14 and +24 oC
- daily relative humidity between 35 and 73 %
- average relative humidity ... between 45 and 55 %

5. Transportation

Under the conditions of their active use, parachutes are transported in portable bags.

Prevent the parachutes from the following effects during transportation:

- a) Moistening of the containers
- b) Contamination of the containers with oil and/or chemicals
- c) Mechanical damage



figure 13a



figure 13b



figure 13c



figure 14a



figure 14b



figure 14c



figure 15a



figure 15b

CHAPTER IV

Technical Conditions of Repairs

1. Repairs permitted by the user
2. Number of stitches of specified types of threads.
3. Layouts for sewing of patches.

Note: Technical Conditions of Repairs (Technické podmínky oprav) are available at the manufacturer or an authorized repair service and are not included as a part of the Instructions for Packing and Use no. P – 004 –01.

CHAPTER V

Removal of Dirt, Washing, Cleaning

1. Dirt (sand, soil, mud, etc.) that contaminated the parachute container and supporting harness can be cleaned mechanically (e.g. by brushing, shaking or rubbing off).
2. It is permitted to clean the dirt that cannot be removed mechanically with a damp piece of cloth moistened in lukewarm water with soap or cleaning detergents. After such cleaning, the container with the harness is required to be dried on a place designated for such purposes.
3. The manufacturer warns the user that using more amount of water with detergents than is recommended may cause the occurrence of stains of various colours or soaking of colours from the inside layer of material into the outside layer of material, in particular with containers of light colours. The warranty does not apply in such cases.
4. Washing of containers with the harness manually or in any washing machines **is forbidden**.
5. Cleaning of containers with the harness with chemical agents containing chlorine or organic solvents **is forbidden**.