Technical description
connecting cords AOZP-RAX SŠ-070 (Automatic reserve parachute opening system) with user manual

P-002-21

1. issue

In Jevíčko 02/2021

List of changes

If the necessity occurs to complete the text of this manual, the owner will receive a notification by means of changes approved by the user which will include new (amended) sheets. The owner of the manual is obliged to record the received changes in the List of changes and replace the invalid sheets for the applicable sheets. The changed or amended parts of the text will be indicated on the side by means of a vertical line and at the bottom with the number and date of the change issue.

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CHAPTER I.

Technical description of the reserve parachute automatic opening (AOZP-RAX)

1. Specification

The automatic reserve parachute opening system (AOZP-RAX) is designed to automatically open the reserve parachute of the wing type immediately when the canopy of the main parachute is "thrown off", thereby reducing the minimum necessary height for the safe function of the reserve parachute.

2. Tactic – technical parameters

The operation of the system is limited by load of max. weight and speed of use

	Real-X	**MMTS-260**
Maximum speed	240 km.h^{-1} (130 kt)	278 km.h^{-1} (150 kt)
Maximum weight	115 kg (253 lb)	160 kg (352 lb)

3. Technical description of the components

The AOZP-RAX SŠ-070 connecting cord (hereinafter referred to as the cord) is made of PAD hem width 15 mm, MICROLINE cord and PAD strap width 25 mm.
A MICROLINE cord is sewn at one end of the trim. It has a Ø 15 mm ring at one end and a RAX loop at the other end.
Quick-release stainless steel snap hook is sewn on the other end.
A ribbon closure (hooks) is sewn on the hem at the full length, which sis used to attach the connecting cord
to the front strap of the reserve parachute (from below) or to the cotton wool of the supporting harness from above. Next, a needle and hem with a ring of Ø 15 mm are sewn on the hem.

Figure no. 1

SECTION II

Instructions for use

1. Function of cords AOZP-RAX

When ejecting the main parachute canopy, the free ends are released from the ejection rings. A stainless steel snap-hook of the connecting cord is attached to the right free end. By applying the force of the detached canopy, a pull is developed through the connecting cord and the Ø 15 mm ring onto a longer yellow throwing cable, which thus ensures the release of the main parachute left free end
in the event of a failure/unplanned release of the right free end of the main parachute. The purpose of this design is to prevent contact of the opening reserve parachute with the main parachute not yet open or its parts in the event of the above failure/unplanned release of the right free end.
Furthermore, Ø 15 mm ring (which is sewn at
the shorter end of the microline cord), develops pressure on the ripcord rope of the reserve parachute, with closing needle pulled from the closing cord. This will open the cover part of the reserve parachute.
Pilot chute opens the container of the reserve parachute and the ejected main parachute, with right free end of the supporting harness connected to the connecting hem of the reserve parachute canopy bag by means of RAX loop, immediately pulls the canopy bag with the stored reserve parachute from the container and then the canopy of the reserve parachute canopy from the reserve parachute canopy bag. Pilot chute
of the reserve is put out of operation. By activating the reserve parachute with the ejected main parachute, the reserve parachute will be opened faster than during activation by spring pilot chute.

If the reserve parachute is activated by a manual reserve parachute ripcord, the pressure of the reserve parachute spring pilot chute behind the connecting hem of the reserve parachute canopy bag will disconnect the RAX loop and thus deactivate the AOZP-RAX. The reserve parachute will be further pulled out from the reserve parachute container by the spring pilot chute of the reserve parachute after its filling with flowing air. Subsequently, the reserve parachute is pulled out of the canopy bag.

2. Inspection before packaging

Before use, the component must be properly inspected. During the inspection, it is necessary to check the metal parts for function and damage. It is also necessary to check if connecting cord hem and the MICROLINE cord are not mechanically damaged. Sewing of the connecting cord and sewing the ribbon cap must not be damaged.

Proceed as follows during assembly.

2.1. Insert the needle, which is sewn on the connecting cord hem, into the hem tube on the shoulder cup of the parachute cover.

2.2. Glue the cord with a ribbon cap (hook) on the right shoulder cup on the ribbon cap (hair) (fig. 4).

2.3. Attach the stainless steel snap-hook the ring Ø 15 mm sewn at the free end. Properly check the stainless steel snap hook for fastening (fig. 5).

2.4. Insert the part of the hem with a Ø 15 mm ring into the hole between the ends of the divided hose of the ejection ripcord at the top of the neck (fig. 6).

2.5. When packing, store the connecting hem of the canopy bag in the usual way in the letter shape "V" under flap No. 1.

2.6. Attach the RAX loop ring to valve No. 2, i.e. pass the ring located at the end of the RAX loop through the hem tube on flap No. 2, pass the closing cord of the reserve parachute through this ring with an auxiliary packing cord and secure it with an auxiliary packing needle (fig. 7).

2.7. Insert the opposite end of the RAX loop with the grommet into the pocket on the connecting hem of the canopy bag, pass the loop that is on the connecting hem of the canopy bag through the grommet and secure the RAX loop needle. Insert the end of the RAX needle into the cover pocket of the RAX loop (fig. 8).

2.8. Fold the connecting hem of the canopy bag (fig. 9). Next, close the flaps of the package according to the numerical marking.

2.9. Next, place the ring of the connecting cord (sewn at the end of the MICROLINE cord) between the ring sewn on the upper flap of the reserve parachute container and the end of the hose (fig. 10).

2.10. The reserve parachute ripcord, including the needle, passes through all rings Ø 15 mm (fig. 10).

2.11. Use the cable needle to secure the closed cover of the reserve parachute (Fig. 10).

2.12. Store the excess MICROLINE cord in a hem pocket (fig. 10).

2.13. Seal the packed reserve parachute (Fig. 10).

Notice:

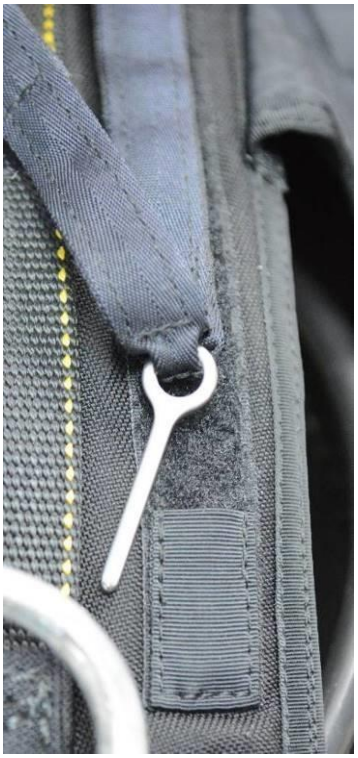
a) When using a shorter AOZP-RAX cord, the cover of the reserve parachute could be accidentally opened due to the small clearance in length!

b) Before jumping, it is necessary to check if the line hem is not released from the ribbon cap. The excess length of the MICROLINE cord must be inserted into the hem pocket on the upper flap of the reserve parachute container. In either case, the RAX system could malfunction.

c) Only undamaged AOZP-RAX cords and AOZP-RAX cords of suitable length (with sufficient clearance in length) may be used.

AOZP-RAX cords can only be used with packaging adapted for this purpose.

Insertion of the needle into the hem tube on the shoulder cup of the parachute cover.



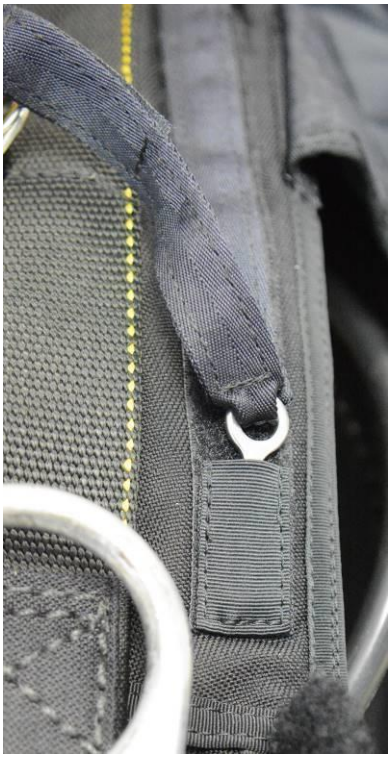


Figure no. 2, 3

View of the AOZP-RAX cord glued to the right shoulder cup.

Figure no. 4

Front view of the attached snap hook to the free end.

Figure no. 5

Connection of the ring between the divided hose ends at the top of the neckline.

Figure no. 6

Connecting the RAX loop ring to valve No. 2 and securing it with an auxiliary wrapping needle.

Figure no. 7

Connection of the canopy bag hem with RAX loop.

Figure no. 8

Folding the connecting hem of the canopy bag.

Figure no. 9

View of the correctly connected ring of the AOZP-RAX system and the closed and sealed parachute cover.

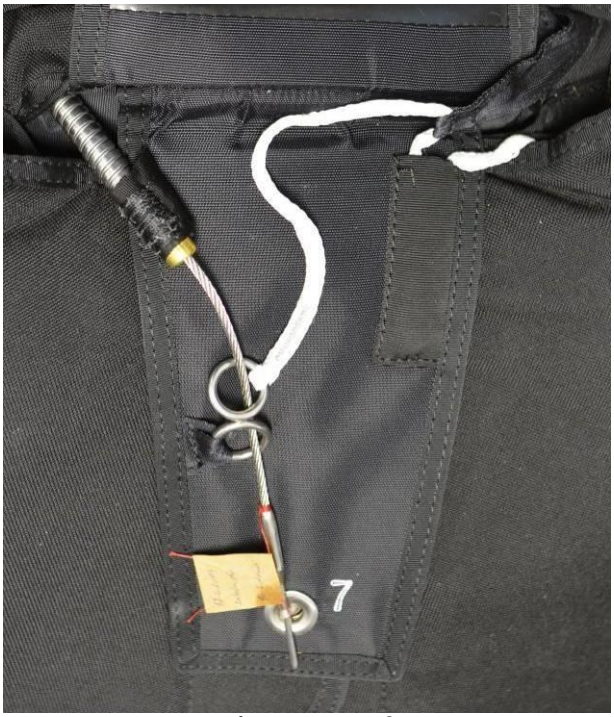


Figure no. 10

Notice: The cable of the reserve parachute ripcord including the needle must pass through the AOZP-RAX cord ring with 15 mm diameter and a spacer ring!

Unused on purpose

2021

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