## Parachute Repair Procedure

**TITLE:** Top reserve flap Javelin **NUMBER OF PAGES:** Five (5)

**APPLICABLE PRODUCTS:** Javelin Odyssey with a solid sewed-in reserve top flap.

Manufactured since the end of 2003.

**DESCRIPTION:** Replacement of top reserve flap.

**AUTHORIZED REPAIRMEN:** FAA Master Parachute Rigger or foreign equivalent. **MATERIALS:** E-thread, colour to match, Type 12 Webbing, duck cloth nylon (Para pack)

black

MACHINES: 301 straight stitch, preferably multi transport, medium duty, zigzag,

preferably multi point, medium duty

**EQUIPMENT:** Scissors, seam ripper or scalpel, marking pencil, 12" ruler, hot knife

**ESTIMATED TIME:** 90 minutes

## **PROCEDURE**

1. Disconnect and remove main and release cable set.

2. Open the reserve container, take the free bag out and remove ripcord. If an AAD is installed, take the control unit out and pull it back into the cable canal.

3.



Fig. 1

Carefully unpick the RSL guide rings (fig.1).

4.



F1g. 2

Carefully unpick in the following order: first the 3-point zigzag in the middle of

the protection flap (fig. 2).



Fig. 3

Then the parts of the 3-point zigzag on the left and right corners. Make sure, only to unpick the stitching exceeding from the binding towards the middle of the flap. (Fig 3.) The protection flap binding itself should stay stitched.



Fig. 4

At last, mark the position of the binding as shown in Fig. 4, unpick the stitching from the top flap very carefully and remove the top flap.

5.



Fig. 5

Remove all thread parts and stitch the binding back on the container bottom along the marked line using a 301 straight stitch medium duty sewing machine. Make sure, all material is and stays between the binding as it was originally. Start and end points are at the red markers (fig. 5)

6. Unpick the binding of the flap on both sides approx. 2 cm and fold it back. Cut of 7 mm of the flap (the part which was previously into the binding), trim the corners

and mark the middle of the flap (both sides) (Fig. 6). Secure the binding on the

flap corners.



Fig. 6

7. Cut (hot knife) a piece of Type 12 webbing, flap width plus 3 cm. Cut (hot knife) a piece of duck cloth nylon, black (para pak), same length and 5 cm wide.



Fig. 7

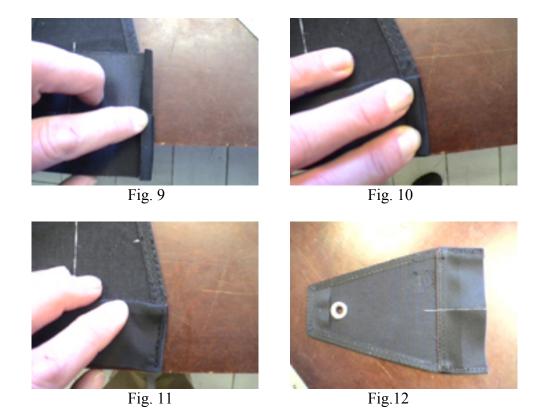
Mark the middle from both pieces and 5 mm from the edge of the duck cloth (inside! See Fig. 7)

8. Stitch the duck cloth onto the inside of the flap, mark 1 cm of the edge of the flap and stitch the type 12 onto the outside of the flap (see Fig. 8)



Fig. 8

9. Fold the Type 12 and the duck cloth (Fig. 9), fold the duck cloth back over the Type 12 (Fig. 10) and stitch both together using a 301 straight stitch medium duty sewing machine starting approx. 4 cm on the binding tape. (See dot mark Fig. 11) Ad a second row of stitches between the seam and the edge of the stiffener plate (Fig. 12)



10. Pull the reserve ripcord housing out and position the flap between the protection flap and the yoke. Make sure, the edge of the stiffener plate is in line with the container binding (see red marks Fig. 13)



Fig. 13

Secure the flap on its place.

11. Stitch the flap back in the position between protection flap and yoke using a medium duty zigzag sewing machine, preferably multi point, by first stitching the middle zigzag, then the ones at the flap sides (Fig 14). Make sure, the reserve ripcord housing is pulled out (Fig. 13) and avoid interfering with it. Use the alignment of the two grommets 0 as a reference.



Fig. 14

12.



Fig. 15

Replace the ripcord housing and the RSL guide rings using a 301 straight stitch medium duty sewing machine (4 times overstitching between rings, 2 triple rows of stitching between housing and rings, 4 mm apart, starting up in the middle) or a medium duty zigzag machine (12 to 15 stitches, start and finish in the middle)