



AEROSTAR SERVICE LETTER 103

11/01/90

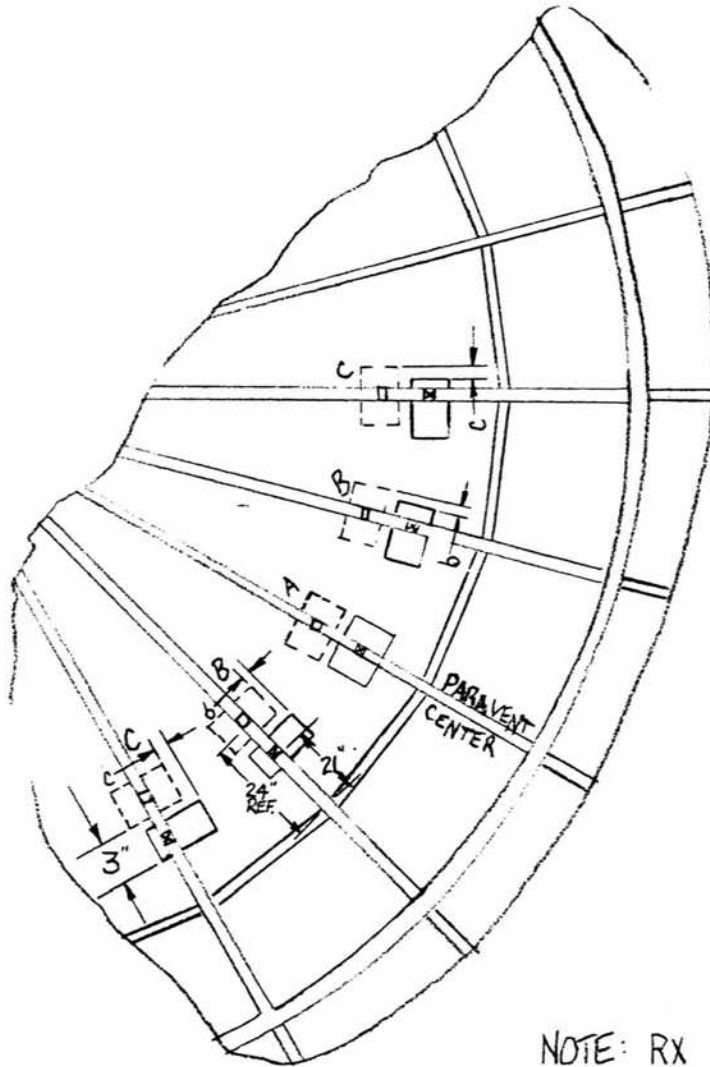
- Subject:** Springtop paravent modification
- Applicability:** Aerostar RX-7; Date of manufacture from 5/86 to 11/90.
Aerostar RX-8; All models manufactured before 11/90.
S55-A, S57-A, S60-A; Date of manufacture from 9/88 to 11/90.
- Problem:** Recent field reports have indicated that a very small number of Springtop paravents have not been sealing completely, resulting in higher than normal fuel consumption rates.
- Discussion:** This problem is related to changes which occurred during Springtop standardization. The alteration of certain dimensions may have made the fit of the paravent more sensitive to shrinkage and/or elongation of the top-cap fabric. Although these balloons did not leak when they left the factory, normal use may have resulted in shrinkage and/or elongation of the top-cap fabric causing minor leaking or stress in the vent area in a limited number of cases.
This modification is not required, and is probably not necessary for the majority of balloons in service. However, if the operator has experienced
- high fuel consumption in a new or nonporous balloon
 - visible leaks in the Springtop paravent
 - excessive stress on the paravent side of the top-cap
- then this procedure may be performed to improve the sealing characteristics of the vent and relieve excessive stress. The procedure is not recognized as preventative maintenance and therefore may not be performed by persons other than those recognized by the FAA to perform aircraft repairs/alterations. Hot air balloon repair station or repairman certificate holders are qualified to perform procedures outlined in this service letter.

Corrective
Action:

The top-cap is stitched to the overstrap in three places on the RX-7 and RX-8; it is stitched in five places on the S55-A, S57-A and S60-A. A stress patch is located on the top-cap at this attachment point. The procedure requires that the stitching (box-x) at these points be removed, and restitched to the overstrap at a point three inches towards the port opening, thereby increasing the amount of top-cap in the vent area. In order to maintain the amount of excess fabric between any two box-x's, an offset is required on the top-cap reinforcement patch. It is important to note here that the top-cap itself is not modified in any way; the reinforcement patches and backup webbing are not removed during this procedure. Only the point of attachment of the top-cap to the overstrap changes.

Procedure:

- 1) First, verify that the distance from the box-x (connecting overstrap to top-cap) to the first circumferential "spider web" in the port along the radial measures 24 in. +/- 1 in. (See Fig. 1) If this dimension is not met, the balloon is not affected by this service letter.
- 2) Measure three inches radially outward (towards the port edge) from the box-x location on the overstrap, and make a mark. (3 locations RX series, 5 locations S series).
- 3) Carefully remove the box-x stitching which connects the overstraps to the top-cap.
- 4) Refer to Figure 1. Except for the center (A) reinforcement patch, the box-x is not re-sewn to the middle of the patch, but is offset as shown. The object of this offset is to preserve the fullness in the vent area of the top-cap; thus the patches are moved towards the center of the vent. Identify each patch as (A), (B), or (C) and mark the offset on the patch.
- 5) Using a single needle machine with "F" thread, (6-9 stitches/in., thread type V-T-285 polyester, Type I or II, Class 1 or 3), sew a box-x connecting the top-cap to the overstrap at the marked locations.



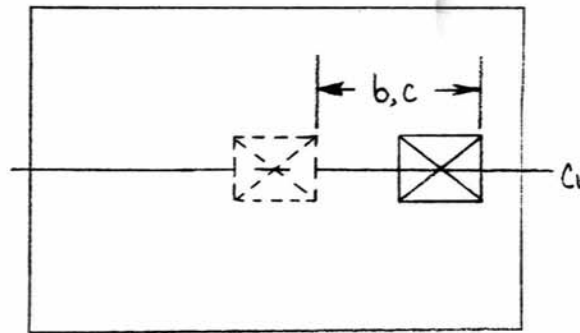
NOT TO SCALE

PORT AND CAP DETAILS

NOTE: RX SERIES BALLOONS
 HAVE ONLY REINFORCEMENT
 LOCATIONS THUS ONLY
 APP

MODEL	PATCH		
	A	B	C
RX-7	0	2	—
RX-8	0	1.75	—
S55-A	0	1	2
S57-A	0	1	2
S60-A	0	1	2

STITCHING DETAIL ATC



4X6
 REINFORCEMENT
 PATCH

FIGURE