

## ULTRAMAGIC MAINTENANCE MANUAL SUPPLEMENT N°17

### 'TEKNO' ENVELOPES

#### Section 1 - General

This supplement defines the particular maintenance and inspection requirements for the Ultramagic Hot Air Balloon 'Tekno' Envelopes S-50, S-70, B-40, B-50, B-55, B-60 and B-70.

Sections 1 to 5 detail the specific maintenance procedures and the parts used. Section 6 details the applicable inspection schedules and test requirements.

The 'Tekno' envelopes use many common components to other standard S and B Type envelopes already detailed in the Maintenance Manual Ed.04. Only those areas, which are different to those already detailed in the Maintenance Manual, are described in this supplement. Indexes are kept in line with the Ultramagic Maintenance Manual to facilitate its use. All other limitations, instructions and safety information contained in the Maintenance Manual remain applicable.

#### Section 2 – Envelope Repairs

##### 2.8 Load tape repairs

For load tape repairs the rectangular stitching gates must be of 12 x 30 mm minimum due to the width of the tape. Square gates shall be 12 x 12 mm minimum.

##### 2.9 Flying wire replacement

Same as described per 2.8.

##### 2.12 Envelope Materials

###### 2.12.2 Fabrics

Further to the standard fabric stated in Appendix 1 of the Maintenance Manual, high tenacity Nylon Rip Stop uncoated fabric is approved for its use on the bottom third of B Series envelopes. When required, contact Ultramagic for further details.

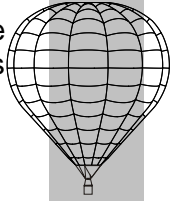
###### 2.12.3 Load Tapes

Ultramagic 'Tekno' load tapes are made from polyester combined with Kevlar®. Only a tape supplied or accepted by Ultramagic must be used for repairs on those envelopes. Its minimum strength must never be below 900 kg.

Polyester tape with a minimum tensile strength of 400 kg is approved on horizontal tapes of the B Serie models -excluding mouth tape-.

###### 2.12.4 Flying Wires

Ultramagic 'Tekno' flying wires are standard of nominal diameter 3 mm (refer to the applicable Maintenance Manual for further details). Alternatively, Stainless Steel wires with nominal diameter 2.5mm are approved for its use in B Series envelopes.



#### 2.12.5 Ropes and Chords

- (1) & (2): Parachute lines are 2 mm diameter Kevlar®.  
(3): Kevlar core rope w/Polyester outside of 2mm is approved on the parachute on B Series envelopes.  
(6): Alternative 5mm Polyester rope is approved as Crown Line on B Series envelopes.

#### 2.12.6 Pulleys

Parachute control rope for the B Series envelopes may be installed with a guiding ring instead of pulley EM-01-0195. Contact Ultramagic for details.

#### 2.12.8 Karabiners

The karabiners permitted for Tekno envelopes are:

- 3000 kN St Steel – Stubai
- 900 kg St Steel – Quick Link (Maillon Rapide)
- 27 kN Steel – Faders
- 23 kN Aluminium (B Series only)
- 450 kg St Steel - Quick Link (Maillon Rapide) for B-40, B-50 and B-55

### Section 3 – Basket Repairs

No change.

### Section 4 – Fuel Systems

No change.

### Section 5 – Instruments

No change.

### Section 6 – Inspection Schedules

6.3 100 hour / annual inspection ("B" Type)

Add the following:

All B-Type inspections shall be C-Type (must include Grab Test of the fabric).

#### 6.6.2 Envelope

Karabiners – Check as per Maintenance Manual but considering the components introduced in 2.12.8 of this Supplement.

### Section 7 – Airworthiness Limitations

No change.