CAMERON
BALLOONS
FAA APPROVED

BALLOON FLIGHT MANUAL SUPPLEMENT

FOR ALL CAMERON U.S. BALLOONS

MODELS 42,000 CU. FT. THROUGH 400,000 CU. FT.

REGISTRATION NUMBER _____

SERIAL NUMBER _____

This supplement must be attached to the FAA Approved Cameron Balloon Flight Manual when the aircraft is modified by the installation of Thunder or Colt basket, burner and fuel tanks.

The information contained herein supplements or supersedes the basic manual only in those areas listed. For limitations, procedures and performance information not contained in this supplement, consult the model specific Cameron Balloons Flight Manual.

FAA APPROVED: R D M Elroy
FOR Steven L. Lardinois
Manager, Systems and Flight Test
FAA Central Region

DATE: JUN 10 2014

Cameron Balloons US
P.O. Box 3672
Ann Arbor, Michigan 48106
Phone (734) 426-5525

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LOG of REVISION

REV.	PAGES	DESCRIPTION	APPROVED BY	DATE
A	All	Flight Manual Supplement to Add T&C Bottom End to Cameron Envelopes, All Volumes	R D McElroy	JUN 1 0 2014

*Approved by Manager, Chicago Aircraft Certification Office, Central Region

NOTE: Revised text is indicated by a vertical black line along left margin.

Cameron Balloons US
P.O. Box 3672
Ann Arbor, Michigan 48106
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FAA APPROVED: JUN 1 0 2014

This manual supplement describes the installation of a Thunder or Colt basket, burner and fuel tanks built under Type Certificate B2EU or B3EU or BA.013 to a Cameron Balloons model built under Type Certificates B1GL, B2GL, B3GL & B4GL. All bottom end equipment must be approved for use in a Thunder or Colt balloon.

Section 1: GENERAL No Change

Section 2: OPERATING LIMITATIONS

1. Add Section 2.0: MAINTENANCE

2.0.1: The maintenance and determination of airworthiness of the Envelope is in accordance with "*Cameron Balloons Instruction for Continued Airworthiness*", *Issue 3 Revision F* Dated November 01, 2012 or the most recent subsequent edition.

2.0.2: The maintenance and determination of airworthiness of the Basket, Burner and Fuel Tanks is in accordance with the "*Cameron Balloons Ltd. Balloon Maintenance Manual Issue 10, Amendment Three*, dated January 25th, 2012 or the most recent subsequent edition. This Manual applies to Thunder & Colt models as well as Cameron Balloons Ltd. Cameron models.

2.0.3: Any service bulletin or airworthiness directive issued by Cameron Balloons Ltd. for Thunder & Colt models which involves any part used on this balloon shall be considered mandatory for compliance on this balloon according to the same terms that the service bulletin or airworthiness directive is required for compliance on a Thunder or Colt balloon. Airworthiness directives and service bulletins issued by Thunder & Colt and applying to an envelope are not applicable to this balloon.

2. Remove Section 2.3: BURNERS

3. Replace Section 2.4: MAXIMUM GROSS WEIGHT

2.4.1: The maximum gross weight of a balloon is determined by the volume of the envelope, the power of the burner, and the certification basis of the basket.

2.4.2 The **GONDOLA** part number and serial number are on the I.D. plate mounted in the basket.

2.4.3 ELIGIBLE BASKETS and MAXIMUM GROSS WEIGHTS PER ENVELOPE VOLUME

All models 42,000 cu. ft. through 100,000 cu. ft.
Type Certificates B1GL, B2GL, B3GL, B4GL
See Section 2.15 for Eligible Fuel Tanks
See Section 2.16 for Eligible Burners Per Envelope Volume

MODEL	GROSS WEIGHT (lbs./kgs.) PER ENVELOPE VOLUME (cu. ft.)									
	42,000	**56,000**	**60,000**	**65,000**	**70,000**	**77,000**	**80,000**	**84,000**	**90,000**	**100,000**
40x40	840 lb. 381.8 kg.	1120 lb. 509.1 kg.	1200 lb. 545.5 kg.	1300 lb. 590.9 kg.	1400 lb. 636.4 kg.	1540 lb. 672.7 kg.	1600 lb. 672.7 kg.	1680 lb. 672.7 kg.	1800 lb. 818.2 kg.	1984 lb. 901.8 kg.
40x48	840 lb. 381.8 kg.	1120 lb. 509.1 kg.	1200 lb. 545.5 kg.	1300 lb. 590.9 kg.	1400 lb. 636.4 kg.	1540 lb. 700.0 kg.	1600 lb. 727.3 kg.	1680 lb. 763.6 kg.	1800 lb. 772.7 kg.	2000 lb. 909.1 kg.
40x54	840 lb. 381.8 kg.	1120 lb. 509.1 kg.	1200 lb. 545.5 kg.	1300 lb. 590.9 kg.	1400 lb. 636.4 kg.	1540 lb. 700.0 kg.	1600 lb. 727.3 kg.	1680 lb. 763.6 kg.	1800 lb. 772.7 kg.	2000 lb. 909.1 kg.
40x60	840 lb. 381.8 kg.	1120 lb. 509.1 kg.	1200 lb. 545.5 kg.	1300 lb. 590.9 kg.	1400 lb. 636.4 kg.	1540 lb. 700.0 kg.	1600 lb. 727.3 kg.	1680 lb. 763.6 kg.	1800 lb. 818.2 kg.	2000 lb. 909.1 kg.
48x48	840 lb. 381.8 kg.	1120 lb. 509.1 kg.	1200 lb. 545.5 kg.	1300 lb. 590.9 kg.	1400 lb. 636.4 kg.	1540 lb. 700.0 kg.	1600 lb. 727.3 kg.	1680 lb. 763.6 kg.	1800 lb. 818.2 kg.	2000 lb. 909.1 kg.
48x68	840 lb. 381.8 kg.	1120 lb. 509.1 kg.	1200 lb. 545.5 kg.	1300 lb. 590.9 kg.	1400 lb. 636.4 kg.	1540 lb. 700.0 kg.	1600 lb. 727.3 kg.	1680 lb. 763.6 kg.	1800 lb. 818.2 kg.	2000 lb. 909.1 kg.
48x68 T	840 lb. 381.8 kg.	1120 lb. 509.1 kg.	1200 lb. 545.5 kg.	1300 lb. 590.9 kg.	1400 lb. 636.4 kg.	1540 lb. 700.0 kg.	1600 lb. 727.3 kg.	1680 lb. 763.6 kg.	1800 lb. 818.2 kg.	2000 lb. 909.1 kg.
48x82 T	840 lb. 381.8 kg.	1120 lb. 509.1 kg.	1200 lb. 545.5 kg.	1300 lb. 590.9 kg.	1400 lb. 636.4 kg.	1540 lb. 700.0 kg.	1600 lb. 727.3 kg.	1680 lb. 763.6 kg.	1800 lb. 818.2 kg.	2000 lb. 909.1 kg.
48x87 T	840 lb. 381.8 kg.	1120 lb. 509.1 kg.	1200 lb. 545.5 kg.	1300 lb. 590.9 kg.	1400 lb. 636.4 kg.	1540 lb. 700.0 kg.	1600 lb. 727.3 kg.	1680 lb. 763.6 kg.	1800 lb. 818.2 kg.	2000 lb. 909.1 kg.
60x87 T	840 lb. 381.8 kg.	1120 lb. 509.1 kg.	1200 lb. 545.5 kg.	1300 lb. 590.9 kg.	1400 lb. 636.4 kg.	1540 lb. 700.0 kg.	1600 lb. 727.3 kg.	1680 lb. 763.6 kg.	1800 lb. 818.2 kg.	2000 lb. 909.1 kg.
60x98 TT	840 lb. 381.8 kg.	1120 lb. 509.1 kg.	1200 lb. 545.5 kg.	1300 lb. 590.9 kg.	1400 lb. 636.4 kg.	1540 lb. 700.0 kg.	1600 lb. 727.3 kg.	1680 lb. 763.6 kg.	1800 lb. 818.2 kg.	2000 lb. 909.1 kg.
60x102 T	840 lb. 381.8 kg.	1120 lb. 509.1 kg.	1200 lb. 545.5 kg.	1300 lb. 590.9 kg.	1400 lb. 636.4 kg.	1540 lb. 700.0 kg.	1600 lb. 727.3 kg.	1680 lb. 763.6 kg.	1800 lb. 818.2 kg.	2000 lb. 909.1 kg.
60x110 TT	840 lb. 381.8 kg.	1120 lb. 509.1 kg.	1200 lb. 545.5 kg.	1300 lb. 590.9 kg.	1400 lb. 636.4 kg.	1540 lb. 700.0 kg.	1600 lb. 727.3 kg.	1680 lb. 763.6 kg.	1800 lb. 818.2 kg.	2000 lb. 909.1 kg.
60x118 TT	840 lb. 381.8 kg.	1120 lb. 509.1 kg.	1200 lb. 545.5 kg.	1300 lb. 590.9 kg.	1400 lb. 636.4 kg.	1540 lb. 700.0 kg.	1600 lb. 727.3 kg.	1680 lb. 763.6 kg.	1800 lb. 818.2 kg.	2000 lb. 909.1 kg.
60x126 TT	840 lb. 381.8 kg.	1120 lb. 509.1 kg.	1200 lb. 545.5 kg.	1300 lb. 590.9 kg.	1400 lb. 636.4 kg.	1540 lb. 700.0 kg.	1600 lb. 727.3 kg.	1680 lb. 763.6 kg.	1800 lb. 818.2 kg.	2000 lb. 909.1 kg.
60x138 TT	840 lb. 381.8 kg.	1120 lb. 509.1 kg.	1200 lb. 545.5 kg.	1300 lb. 590.9 kg.	1400 lb. 636.4 kg.	1540 lb. 700.0 kg.	1600 lb. 727.3 kg.	1680 lb. 763.6 kg.	1800 lb. 818.2 kg.	2000 lb. 909.1 kg.
60x160 TT	840 lb. 381.8 kg.	1120 lb. 509.1 kg.	1200 lb. 545.5 kg.	1300 lb. 590.9 kg.	1400 lb. 636.4 kg.	1540 lb. 700.0 kg.	1600 lb. 727.3 kg.	1680 lb. 763.6 kg.	1800 lb. 818.2 kg.	2000 lb. 909.1 kg.
60x170 TT	840 lb. 381.8 kg.	1120 lb. 509.1 kg.	1200 lb. 545.5 kg.	1300 lb. 590.9 kg.	1400 lb. 636.4 kg.	1540 lb. 700.0 kg.	1600 lb. 727.3 kg.	1680 lb. 763.6 kg.	1800 lb. 818.2 kg.	2000 lb. 909.1 kg.

CAMERON
BALLOONS

Balloon Flight Manual Supplement
for Cameron Model _____
with Thunder or Colt Bottom End

All models 105,000 cu. ft. through 210,000 cu. ft.
Type Certificates B1GL, B2GL, B3GL, B4GL
See Section 2.15 for Eligible Fuel Tanks
See Section 2.16 for Eligible Burners Per Envelope Volume

MODEL	GROSS WEIGHT (lbs./kgs.) PER ENVELOPE VOLUME (cu. ft.)								
	105,000	**120,000**	**133,000**	**140,000**	**145,000**	**150,000**	**160,000**	**180,000**	**210,000**
40x40	1984 lb. 901.8 kg.	1984 lb. 672.7 kg.	1984 lb. 672.7 kg.	1984 lb. 672.7 kg.	1984 lb. 672.7 kg.	1984 lb. 672.7 kg.	1984 lb. 672.7 kg.	1984 lb. 672.7 kg.	1984 lb. 672.7 kg.
40x48	2100 lb. 954.5kg.	2315 lb. 1052 kg.	2315 lb. 1052 kg.	2315 lb. 1052 kg.	2315 lb. 1052 kg.	2315 lb. 1052 kg.	2315 lb. 1052 kg.	2315 lb. 1052 kg.	2315 lb. 1052 kg.
40x54	2100 lb. 954.5 kg.	2320 lb. 1055 kg.	2320 lb. 1055 kg.	2320 lb. 1055 kg.	2320 lb. 1055 kg.	2320 lb. 1055 kg.	2320 lb. 1055 kg.	2320 lb. 1055 kg.	2320 lb. 1055 kg.
40x60	2100 lb. 954.5 kg.	2400 lb. 1091 kg.	2660 lb. 1209 kg.	2800 lb. 1273 kg.	2900 lb. 1318 kg.	3000 lb. 954.5 kg.	3197 lb. 954.5 kg.	3197 lb. 954.5 kg.	3197 lb. 954.5 kg.
48x48	2100 lb. 954.5 kg.	2400 lb. 1091 kg.	2646 lb. 1203 kg.	2646 lb. 1203 kg.	2646 lb. 1318 kg.	2646 lb. 1203 kg.	2646 lb. 1203 kg.	2646 lb. 1203 kg..	2646 lb. 1203 kg.
48x68	2100 lb. 954.5 kg.	2400 lb. 1091 kg.	2660 lb. 1209 kg.	2800 lb. 1273 kg.	2900 lb. 1318 kg.	3000 lb. 1364 kg.	3200 lb. 1455 kg.	3594 lb. 1634 kg.	3594 lb. 1634 kg.
48x68 T	2100 lb. 954.5 kg.	2400 lb. 1091 kg.	2660 lb. 1209 kg.	2800 lb. 1273 kg.	2900 lb. 1318 kg.	3000 lb. 1364 kg.	3197 lb. 1453 kg.	3197 lb. 1453 kg.	3197 lb. 1453 kg.
48x82 T	2100 lb. 954.5 kg.	2400 lb. 1091 kg.	2660 lb. 1209 kg.	2800 lb. 1273 kg.	2900 lb. 1318 kg.	3000 lb. 1364 kg.	3200 lb. 1455 kg.	3594 lb. 1634 kg.	3594 lb. 1634 kg.
48x87 T	2100 lb. 954.5 kg.	2400 lb. 1091 kg.	2660 lb. 1209 kg.	2800 lb. 1273 kg.	2900 lb. 1318 kg.	3000 lb. 1364 kg.	3200 lb. 1455 kg.	3594 lb. 1634 kg.	3594 lb. 1634 kg.
60x87 T	2100 lb. 954.5 kg.	2400 lb. 1091 kg.	2660 lb. 1209 kg.	2800 lb. 1273 kg.	2900 lb. 1318 kg.	3000 lb. 1364 kg.	3200 lb. 1455 kg.	3600 lb. 1636 kg.	4200 lb. 1909 kg.
60x98 TT	2100 lb. 954.5 kg.	2400 lb. 1091 kg.	2660 lb. 1209 kg.	2800 lb. 1273 kg.	2900 lb. 1318 kg.	3000 lb. 1364 kg.	3200 lb. 1455 kg.	3600 lb. 1636 kg.	4200 lb. 1909 kg.
60x102 T	2100 lb. 954.5 kg.	2400 lb. 1091 kg.	2660 lb. 1209 kg.	2800 lb. 1273 kg.	2900 lb. 1318 kg.	3000 lb. 1364 kg.	3200 lb. 1455 kg.	3600 lb. 1636 kg.	4200 lb. 1909 kg.
60x110 TT	2100 lb. 954.5 kg.	2400 lb. 1091 kg.	2660 lb. 1209 kg.	2800 lb. 1273 kg.	2900 lb. 1318 kg.	3000 lb. 1364 kg.	3200 lb. 1455 kg.	3600 lb. 1636 kg.	4200 lb. 1909 kg.
60x118 TT	2100 lb. 954.5 kg.	2400 lb. 1091 kg.	2660 lb. 1209 kg.	2800 lb. 1273 kg.	2900 lb. 1318 kg.	3000 lb. 1364 kg.	3200 lb. 1455 kg.	3600 lb. 1636 kg.	4200 lb. 1909 kg.
60x126 TT	2100 lb. 954.5 kg.	2400 lb. 1091 kg.	2660 lb. 1209 kg.	2800 lb. 1273 kg.	2900 lb. 1318 kg.	3000 lb. 1364 kg.	3200 lb. 1455 kg.	3600 lb. 1636 kg.	4200 lb. 1909 kg.
60x138 TT	2100 lb. 954.5 kg.	2400 lb. 1091 kg.	2660 lb. 1209 kg.	2800 lb. 1273 kg.	2900 lb. 1318 kg.	3000 lb. 1364 kg.	3200 lb. 1455 kg.	3600 lb. 1636 kg.	4200 lb. 1909 kg.
60x160 TT	2100 lb. 954.5 kg.	2400 lb. 1091 kg.	2660 lb. 1209 kg.	2800 lb. 1273 kg.	2900 lb. 1318 kg.	3000 lb. 1364 kg.	3200 lb. 1455 kg.	3600 lb. 1636 kg.	4200 lb. 1909 kg.
60x170 TT	2100 lb. 954.5 kg.	2400 lb. 1091 kg.	2660 lb. 1209 kg.	2800 lb. 1273 kg.	2900 lb. 1318 kg.	3000 lb. 1364 kg.	3200 lb. 1455 kg.	3600 lb. 1636 kg.	4200 lb. 1909 kg.

All models 225,000 cu. ft. through 400,000 cu. ft.
Type Certificates B1GL, B2GL, B3GL, B4GL
See Section 2.15 for Eligible Fuel Tanks
See Section 2.16 for Eligible Burners Per Envelope Volume

MODEL	GROSS WEIGHT (lbs./kgs.) PER ENVELOPE VOLUME (cu. ft.)								
	225,000	**250,000**	**275,000**	**300,000**	**315,000**	**340,000**	**375,000**	**400,000**	
40x40	1984 lb. 901.8 kg.	1984 lb. 672.7 kg.	1984 lb. 672.7 kg.	1984 lb. 672.7 kg.	1984 lb. 672.7 kg.	1984 lb. 672.7 kg.	1984 lb. 672.7 kg.	1984 lb. 672.7 kg.	1984 lb. 672.7 kg.
40x48	2315 lb. 1052 kg.	2315 lb. 1052 kg.	2315 lb. 1052 kg.	2315 lb. 1052 kg.	2315 lb. 1052 kg.	2315 lb. 1052 kg.	2315 lb. 1052 kg.	2315 lb. 1052 kg.	2315 lb. 1052 kg.
40x54	2320 lb. 1055 kg.	2320 lb. 1055 kg.	2320 lb. 1055 kg.	2320 lb. 1055 kg.	2320 lb. 1055 kg.	2320 lb. 1055 kg.	2320 lb. 1055 kg.	2320 lb. 1055 kg.	2320 lb. 1055 kg.
40x60	3197 lb. 1453 kg.	3197 lb. 1453 kg.	3197 lb. 1453 kg.	3197 lb. 1453 kg.	3197 lb. 1453 kg.	3197 lb. 1453 kg.	3197 lb. 1453 kg.	3197 lb. 1453 kg.	3197 lb. 1453 kg.
48x48	2646 lb. 1203 kg.	2646 lb. 1203 kg.	2646 lb. 1203 kg.	2646 lb. 1203 kg.	2646 lb. 1318 kg.	2646 lb. 1203 kg.	2646 lb. 1203 kg.	2646 lb. 1203 kg..	2646 lb. 1203 kg.
48x68	2100 lb. 954.5 kg.	2400 lb. 1091 kg.	2660 lb. 1209 kg.	2800 lb. 1273 kg.	2900 lb. 1318 kg.	3000 lb. 1364 kg.	3200 lb. 1455 kg.	3594 lb. 1634 kg.	3594 lb. 1634 kg.
48x68 T	3197 lb. 1453 kg.	3197 lb. 1453 kg.	3197 lb. 1453 kg.	3197 lb. 1453 kg.	3197 lb. 1453 kg.	3197 lb. 1453 kg.	3197 lb. 1453 kg.	3197 lb. 1453 kg.	3197 lb. 1453 kg.
48x82 T	3594 lb. 1634 kg.	3594 lb. 1634 kg.	3594 lb. 1634 kg.	3594 lb. 1634 kg.	3594 lb. 1634 kg.	3594 lb. 1634 kg.	3594 lb. 1634 kg.	3594 lb. 1634 kg.	3594 lb. 1634 kg.
48x87 T	3594 lb. 1634 kg.	3594 lb. 1634 kg.	3594 lb. 1634 kg.	3594 lb. 1634 kg.	3594 lb. 1634 kg.	3594 lb. 1634 kg.	3594 lb. 1634 kg.	3594 lb. 1634 kg.	3594 lb. 1634 kg.
60x87 T	4500 lb. 2045 kg.	5000 lb. 2273 kg.	5203 lb. 2365 kg.	5203 lb. 2365 kg.	5203 lb. 2365 kg.	5203 lb. 2365 kg.	5203 lb. 2365 kg.	5203 lb. 2365 kg	5203 lb. 2365 kg.
60x98 TT	4500 lb. 2045 kg.	5000 lb. 2273 kg.	5500 lb. 1209 kg.	6000 lb. 2727 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.
60x102 T	4500 lb. 2045 kg.	5000 lb. 2273 kg.	5500 lb. 2500 kg.	6000 lb. 2727 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.
60x110 TT	4500 lb. 2045 kg.	5000 lb. 2273 kg.	5500 lb. 2500 kg.	6000 lb. 2727 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.
60x118 TT	4500 lb. 2045 kg.	5000 lb. 2273 kg.	5500 lb. 2500 kg.	6000 lb. 2727 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.
60x126 TT	4500 lb. 2045 kg.	5000 lb. 2273 kg.	5500 lb. 2500 kg..	6000 lb. 2727 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.
60x138 TT	4500 lb. 2045 kg.	5000 lb. 2273 kg.	5500 lb. 2500 kg.	6000 lb. 2727 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.
60x160 TT	4500 lb. 2045 kg.	5000 lb. 2273 kg.	5500 lb. 2500 kg.	6000 lb. 2727 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.
60x170 TT	4500 lb. 2045 kg.	2273 kg. 1091 kg.	5500 lb. 2500 kg.	6000 lb. 2727 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.	6250 lb. 2841 kg.

4. Add Section 2.15 – ELIGIBLE THUNDER & COLT FUEL TANKS

FUEL TANKS may be used in any configuration

Thunder & Colt Model V20, Stainless Steel

Thunder & Colt Model V30, Stainless Steel

Thunder & Colt Model V40, Stainless Steel

Worthington Model LE-43-U4, Aluminum DOT Spec. 4E-240

Cameron Balloons/Thunder & Colt CB599, Stainless Steel

Cameron Balloons/Thunder & Colt CB426, Stainless Steel

Cameron Balloons/Thunder & Colt CB959, Stainless Steel

Cameron Balloons/Thunder & Colt CBUS1050, Stainless Steel

Cameron Balloons/Thunder & Colt CBUS1060, Stainless Steel

5. Add Section 2.16 – ELIGIBLE THUNDER & COLT BURNERS PER ENVELOPE VOLUME

ENVELOPE VOLUME	MODEL	CONFIGURATION
42,000	Colt MK II	Single
	Thunder	Single
	Colt Magnum	Single
	Thunder & Colt Stratus	Single
56,000	Colt MK II	Single
60,000	Thunder	Single
65,000	Colt Magnum	Single
70,000	Thunder & Colt Stratus	Single
77,000		
80,000	Colt MK II (C2)	Double
84,000	Thunder	Double
90,000	Colt MK III (C3)	Double
100,000	Colt Magnum	Double
	Thunder & Colt Stratus	Double
105,000	Colt MKII (C2)	Double
120,000	Thunder	Double
140,000	Colt MK III (C3)	Double
145,000	Colt Magnum	Double
150,000	Thunder & Colt Stratus	Double
160,000	Colt MKII (C2)	Double
180,000	Thunder	Double
	Colt MK III (C3)	Double
	Colt Magnum	Double
	Thunder & Colt Stratus	Double
	Colt MK II (C2)	Triple
	Colt MK III (C3)	Triple
	Colt Magnum	Triple
	Thunder & Colt Stratus	Triple
210,000	Colt MKII (C2)	Double
225,000	Thunder	Double
250,000	Colt MK III (C3)	Double
275,000	Colt Magnum	Double
	Thunder & Colt Stratus	Double
	Colt MK II (C2)	Triple
	Colt MK III (C3)	Triple
	Colt Magnum	Triple
	Thunder & Colt Stratus	Triple
	Colt MK II (C2)	Quad
	Colt MK III (C3)	Quad
	Colt Magnum	Quad

300,000	Colt MK II (C2)	Triple
315,000	Colt MK III (C3)	Triple
340,000	Colt Magnum	Triple
375,000	Thunder & Colt Stratus	Triple
400,000		
	Colt MK II (C2)	Quad
	Colt MK III (C3)	Quad
	Colt Magnum	Quad

SECTION 3: EMERGENCY PROCEDURES

1. SUBSTITUTE Section 3.13: FAILURE OF PILOT FLAME

(a) Check that the valves on the cylinder and burner (if fitted) are open.

(b) Check that the pilot light hoses are properly connected to the cylinder.

(c) Re-light the pilot light.

(d) If both pilot lights fail and cannot be re-lit, proceed as follows:

IF THE BURNER HAS A LIQUID FIRE:

Open the valve a crack and use this as the pilot light for the main burner until an emergency landing can be safely completed.

IF NOT:

Alternative 1 – Burners with Worcester – type blast valves:

Crack one blast valve partially open and ignite the propane directly on the jets. Adjust the valve to give a flame approximately 1 ft. (30 cm) high. Leave this flame to act as a pilot light. Fly on the other burner and land as soon as possible.

Alternative 2 – Burners with Rego Valves:

Crack the blast valve open and light directly on the main jet. Open blast valve fully while slowly closing cylinder valve until only approximately 1 ft. (30 cm) flame remains. Leave flame at this stage to act as a pilot light and fly on the alternative burner until an emergency landing can be safely completed.

NOTE: continuous operation of a propane valve open at very low settings will result in some freezing and is only satisfactory for short periods of time – LAND AS SOON AS POSSIBLE.

2. ADD SECTION 3.21 – LOSS OF MAIN BURNER

Change to the alternative burner. If one burner fails, fly on the alternative unit and land as soon as possible.

If both burners malfunction, check that the cylinder(s) connected to the burner are not empty, are properly connected and are turned on. If there is still no fuel flow try another cylinder. If the fault cannot be rectified, prepare for a heavy landing. Follow the emergency landing procedure.

The balloon can be flown entirely on the liquid fire burner if the other burner fails. This unit is less powerful, but is sufficient for emergency operation until a landing can be completed.

SECTION 4: NORMAL PROCEDURES

1. ADD SECTION 4.1.1 – LOG BOOK ENTRIES

Before EACH flight in which the Thunder & Colt basket, burners and fuel tanks have been switched from the Cameron basket, burners and fuel tanks, the log book must show the installation of the basket, burners and fuel tanks by model number and serial number. If the balloon is flown regularly with the same basket, burner and fuel tanks, the entry need be made once, and each subsequent switch with the same equipment need say only "equipped as per entry on (DATE)" referring back to date entered for first installation.

2. ADD SECTION 4.2.4.1 – ASSEMBLY OF BALLOON

The various sub-components of the balloon must be assembled in the correct orientation to each other. To achieve this, some parts are color-coded, and others have distinguishing features, as below.

Step 1: Slide the four nylon rods into the burner frame socket (fig. 4.2.4.1a) and stand the burner on the rods. Locate the corner of the basket with the wire end colored red. This will be at the bottom right hand corner when the basket is tipped over for inflation (viewed from the basket, looking toward the envelope). Bearing this in mind, two people can lift the burner and rod assembly, by the rods, into the sockets on top of the basket. The orientation is correct if the pressure gauges on the burner are the right way up when the basket is tipped over for inflation. The assembly should look like fig. 4.2.4.1 b). In a T-partition basket, the burner is usually offset towards the pilot compartment at the right side.

Step 2: Now fit the cylinders. The orientation of master cylinders is important to prevent the pilot light freezing on inflation. The liquid valve outlet should face down.

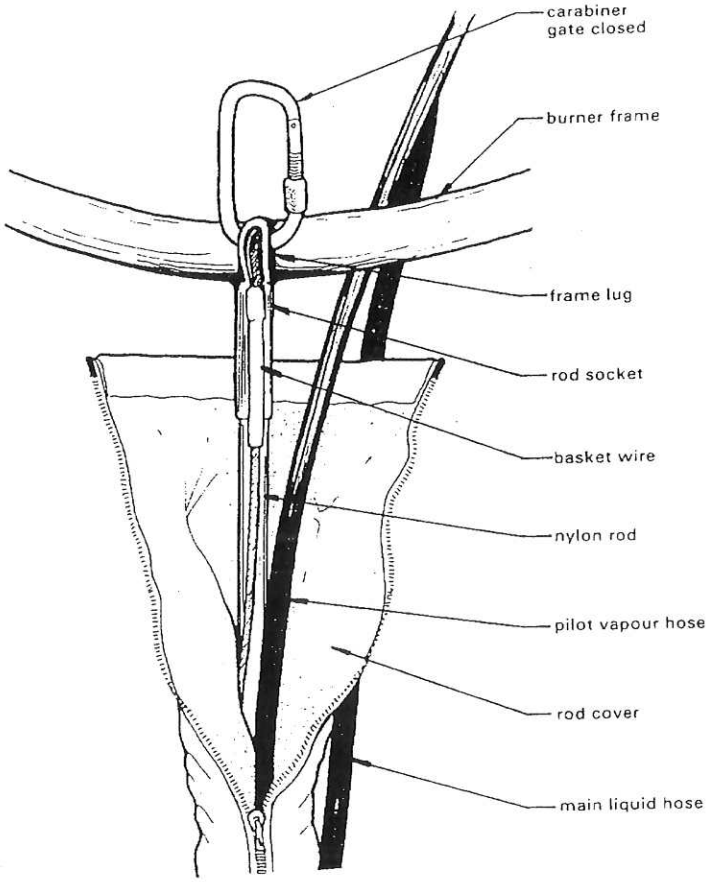
Note that all cylinders should be fixed with two straps. On all Thunder & Colt balloons, the minimum requirement for flight is two full cylinders which are capable of supplying fuel to the pilot light of the burner used.

Step 3: Connect the fuel tanks as follows: First ensure that the blast valve handles will be at right angles to the fuel hoses. On screw-type tank valves clock-wise rotation closes the valve. Now fasten the quick connectors. Always fit both liquid hoses and all pilot hoses.

Check each cylinder in turn for leaks by opening the liquid valve at cylinder (with blast valves closed). If no leaks can be heard or observed, turn on pilot valves at cylinder and burner and light pilot light. After a successful burn test, close the tank valves for the liquid supply and vent the fuel system by operating the blast valves. Finally, turn off the pilot light at the burner. Repeat for other side of double burner system.

Step 4: If covers are used over the nylon rods they can be fitted now. Pilot hoses can be covered, but the liquid hoses are best strapped to the outside of the covers to permit easy cylinder changes in flight (unless a fuel manifold is utilized). At this stage remember that the basket wires should be inside the rod covers. See figs. 4.2.4.1b and 4.2.4.1a for the finished assembly.

Step 5: Passenger briefing (with basket is upright): Show passenger(s) various controls etc. Give the safety briefing – how to climb in, what to hold onto, etc (done at this stage because no noise, no rush, etc).



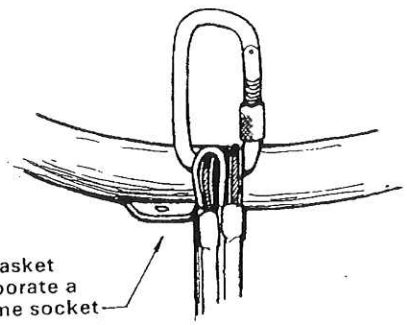


Figure 4.2.4.1a

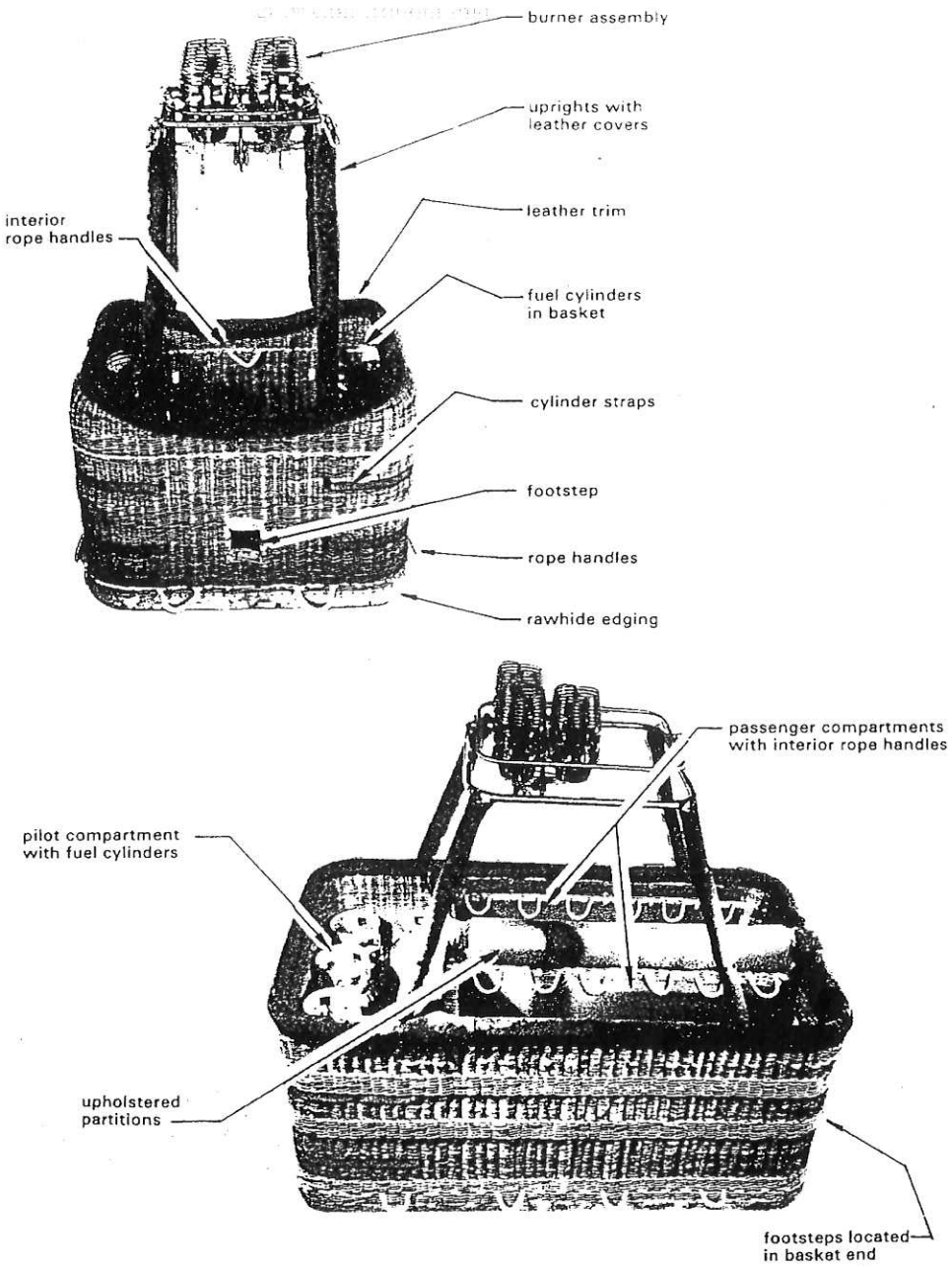


Figure 4.2.4.1b

3. **REMOVE SECTION 4.2.5 - CONNECT AND INSPECT FUEL SYSTEM**

4. **ADD SECTION 4.2.6.0 – ENVELOPE CONNECTION – THUNDER & COLT**

Connection of envelope to assembled basket:

Lay the basket on its side with the burner pointing downwind. Stretch out the mouth of the envelope. Group the flying wires as follows:

8 Cable Model	**12 Cable Model**
Cables # 8 & 1 Upper Right Carabiner	Cables # 11, 12 & 1 Upper Right Carabiner
Cables # 2 & 3 Lower Right Carabiner	Cables # 2, 3, & 4 Lower Right Carabiner
Cables # 4 & 5 Lower Left Carabiner	Cables # 5, 6 & 7 Lower Left Carabiner
Cables # 6 & 7 Upper Left Carabiner	Cables # 8, 9 & 10 Upper Left Carabiner
16 Cable Model	**20 Cable Model**
Cables # 14, 15, 16 & 1 Upper Right Carabiner	Cables # 17, 18, 19, 20 & 1 Upper Right Carabiner
Cables # 2, 3, 4& 5 Lower Right Carabiner	Cables # 2, 3, 4, 5 & 6 Lower Right Carabiner
Cables # 6, 7, 8 & 9 Lower Left Carabiner	Cables # 7, 8, 9, 10 & 12 Lower Left Carabiner
Cables # 10, 11, 12 & 13 Upper Left Carabiner	Cables # 13, 14, 15 & 16 Upper Left Carabiner
24 Cable Model	**12 V'd Cable Model**
Cables # 20, 21, 22, 23, 24 & 1 Upper Right Carabiner	Cables # 20 & 21, 22 & 23, 24 & 1 Upper Right Carabiner
Cables # 2, 3, 4, 5, 6 & 7 Lower Right Carabiner	Cables # 2 & 3, 4 & 5, 6 & 7 Lower Right Carabiner
Cables # 8, 9, 10, 11, 12 & 13 Lower Left Carabiner	Cables # 8 & 9, 10 & 11, 12 & 13 Lower Left Carabiner
Cables # 14, 15, 16, 17, 18 & 19 Upper Left Carabiner	Cables # 14 & 15, 16 & 17, 18 & 19 Upper Left Carabiner

As viewed from behind the burner with the basket on its side ready for inflation and looking into the envelope mouth.

One or two carabiners may be used in each corner. Connect the flying wires or flying wires carabiner to the carabiner that is already attaching the burner frame and basket wire, as shown in fig. 4.2.4.1a. Care should be taken to see that the flying wires are not crossed or twisted at this point. Screw the carabiner gates closed, and then back off 1/4 turn.

Do not lay out the complete envelope before connecting the flying wires to the basket.

Ensure that the restraint system is fitted before the envelope is pulled out.

SECTION 5: PERFORMANCE **No Change**

SECTION 6: WEIGHT AND EQUIPMENT

1. ADD SECTION 6.1 – WEIGHT AND EQUIPMENT – THUNDER or COLT BOTTOM END

Cameron Balloons US Models with Thunder or Colt Bottom End

CAMERON ENVELOPE with thermistor wire, scoop or skirt, carrying bag, crown line, and flying wires

Part Number _____ _____Lbs. or

Serial Number_____ _____Kgs.

THUNDER or COLT BURNER with fuel hoses and snaplinks (carabiners)

Model _____ _____Lbs. or

Serial Number_____ _____Kgs.

THUNDER or COLT BASKET with suspension cables, poles, covers, instruments, fire extinguisher, manifolds and documents in case

Model _____ _____Lbs. or

Serial Number_____ _____Kgs.

THUNDER or COLT FUEL TANKS with padded covers

Serial Number	Model/Part Number	Pounds	Kilograms
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____