

**35 FT. DIAMETER MC1-1D  
TROOP BACK PARACHUTE ASSEMBLY**

**P/N 11-1-900-3  
NSN 1670-01-487-0777**

**TECHNICAL DATA  
UPDATED MAY 17, 2004**

**U.S. PART NO:**

**The standard assembly consists of:**

**11-1-900-2**

**MC1-1D ASSEMBLY**

1. 68K147-6  
(11-1-1501-3)  
(11-1-3722) 35 Ft. Diameter Maneuverable Canopy modified to 17 openings, with Anti-inversion Net; 0-5 – 5.0 CFM cloth
2. 11-1-6994-1 Deployment Bag without attached Static Line and without Break Cord Strap and Pocket
3. 11-1-6993-1 15' Universal Static Line
4. 11-1-6993-2 5' Extension Static Line
5. 11-1-6991 Static Line Snap
6. 62J4342 Pack Tray with Static Line stow bars
7. 11-1-2143-1 Harness Assembly with Ejector Snaps and Capewell Cable Type Canopy Release P/N 100681, and Triangle Link (See Page 7)
8. 11-1-2149-1 30" Fluted Risers (2 Each) with Fasteners on Log Pocket

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**1. Canopy Assembly, P/N 11-1-1501-3:**

Shape:	Parabolic
Diameter:	35 Ft. (Nominal) - Modified
Inflated Diameter	24.5 Ft. (Skirt)
Number of Gores	30
Number of Panels Per Gore	5
Number of Radial Tapes	30
Number of Vent Lines	15
Number of Pocket Bands	15; 11-3/4" cut length
Number of Suspension Lines	30
Number of Connector Links	4
Number of Orifice Openings	17
Line Arrangement per Link:	Left and Right Rear Riser – 7 each per link Left and Right Front Riser – 8 each per link
Gore Material:	1.1 ounce PIA-C-44378, Type I, Low Porosity 0-5 – 5.0 CFM ripstop nylon parachute cloth, Camouflage Green #483, 36-1/2" width, 45# minimum tensile strength warp and fill
Radial Tape Material:	9/16", PIA-W-4088, Type I, Class 2, Condition U, 500# tensile strength, Natural, cut length 17'
Suspension Line Reinforcement Material:	9/16", PIA-W-4088, Type I, Class 2, Condition U, 500# tensile strength, Camouflage Green #483
Vent Line Material:	Nylon Cord, PIA-C-5040, Type 2, 400# tensile strength, Camouflage Green #483 (See Page 6)
Suspension Line Material:	Nylon Cord, PIA-C-5040, Type 2, 400# tensile strength, Camouflage Green #483, 22' cut length at 10# tension (See Page 6)

1. **Canopy Assembly, P/N 11-1-1501-3: (Cont.)**

Control Line Material:	Nylon Cord, PIA-C-5040, Type 2, 400# tensile strength, Camouflage Green #483, 25' cut length at no tension (See Page 6)
Bridle Line Material:	Nylon Cord, PIA-C-5040, Type 2, 400# tensile strength, Camouflage Green #483, 25' cut 72" length at 5# tension (See Page 6)
Bridle Line Reinforcement Material:	PIA-T-5038, Type 3, 1", Class 2, Camouflage Green #483, 525# tensile strength
Connector Link:	L-bar, PS 22002-1, 3000# proof load
Net Skirt Material:	A-A-55183, Natural, 18" width
Pocket Band Material:	PIA-T-1001, 1", Camouflage Green #483, 600# tensile strength, 11-3/4" long
Skirt Hem Material:	PIA-T-1001, 1", Camouflage Green #483, 600# tensile strength
Vent Hem Material:	PIA-W-5625, 4000# tensile strength, 1", Natural
Orifice Opening Reinforcing Tape Material:	Nylon Tape, PIA-T-5038, Type 3, 1-1/2", Class 2, 850# tensile strength, Camouflage Green #483
Toggle:	68B219, Maple
Canopy Stitching:	Nylon Thread, V-T-295, Type I/II, Class A, Size B, E, Natural
Canopy Orifice Reinforcement Stitching (12 places):	Nylon Thread, V-T-295, Type I/II, Class A, Size E, Natural, 304/308 zigzag, 1/4" width, 30" length
Bridle Line Reinforcement Stitching (8 places total):	Nylon Thread, V-T-295, Type I/II, Class A, Size E, Natural, 308 zigzag 5/16" width – 2 rows on each tape

2. **Deployment Bag, P/N 11-1-6994-1, Without Attached Static Line and Without Break Cord Strap and Pocket:**

Closing Method: Locking loop and tie

2. **Deployment Bag, P/N 11-1-6994-1, Without Attached Static Line and Break Cord Strap and Pocket (Cont.)**

Bag Panel;	Cotton Sateen Cloth, MIL-C-10296, 9 oz., Camouflage
Pocket Material:	Green #483, 140# tensile strength warp; 118# tensile strength fill
Stow Loop Material:	Cotton Webbing, PIA-W-530, 2", Natural, Type 2, Class I, 585# tensile strength
Main Reinforcing Strap:	Nylon Webbing, PIA-W-27265, Type VIII, 1-23/32", Class 2, Camouflage Green #483, 4000# tensile strength, with PIA-C-419, Camouflage Green #483, Cotton cloth covered loop
Cover Panel Reinforcement:	Nylon Webbing, PIA-W-4088, Type I, 9/16", Camouflage Green #483, 500# tensile strength, Class 2, Condition U
Tie Loops:	Nylon Webbing, PIA-W-4088, Type I, 9/16", Camouflage Green #483, 500# tensile strength, Class 2, Condition U
Locking Loop:	Nylon Tape, PIA-T-5038, Type IV, 1", Class 2, Camouflage Green #483, 1000# tensile strength
Binding Type:	Cotton Webbing, PIA-W-5661, Type III, 3/4", Camouflage Green #483, 75# tensile strength
Closing Band:	Nylon Tape, PIA-T-5038, Type IV, 1", Class 2, Camouflage Green #483, 1000# tensile strength
Static Line Snap:	11-1-6991, 1750# proof load
Universal Static Line 15'; Extension Static Line 5'	Nylon Webbing Tube Edge, PIA-W-1002, 3/4", Yellow, with green marker yarn treated with Dooley, Lubricant, 4000# tensile strength
Deployment Bag Stitching:	Nylon Thread, V-T-295, Type I/II, Class A, Camouflage Green #483, Size E, 3-C, 5-C

3. **Pack Tray, P/N 62J4342:**

Pack Panel Material:	Nylon Cloth, PIA-C-7219, Type III, Class 3, Camouflage Green #483, 325# warp tensile strength; 275# fill tensile strength
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3. **Pack Tray, P/N 62J4342 (Cont):**

Stiffener Panel Reinforcement Material:	Nylon Cloth, PIA-C-3953, Class 2, Treated, Natural, 1100# tensile strength
Panel Reinforcement Material; Static Line Stow Bars:	Nylon Tape, PIA-T-5038, Type IV, Class 2, 1", Camouflage Green #483, 1000# tensile strength
Belt Material:	Nylon Webbing, PIA-W-27265, Type VIII, Class 2, 1-23/32", Camouflage Green #483, 4000# tensile strength
Belt Adapter:	PS 22014-3, 1000# proof load
Harness Keeper:	Nylon Webbing, PIA-W-27265, Type VI, Class 2, 1-23/32", Camouflage Green #483, 2500# tensile strength
Harness Keeper Fasteners:	Locking type fasteners, NASM 27983-1, -2, -3 and -4
Harness Keeper Retainer:	Nylon Webbing, PIA-W-27265, Type XV11, Class 2, 1", Camouflage Green #483, 2500# tensile strength
Static Line Retainer	Cotton Elastic, PIA-W-5664, Type I/II, Class 1, 1", Camouflage Green #483
Retainer Loops Material:	Nylon Webbing, PIA-W-27265, Type III, 1-1/4", Camouflage Green #483, 800# tensile strength, Class 2
Binding:	Nylon Tape, PIA-T-5038, Type III, 3/4", Class 2, Camouflage Green #483, 400# tensile strength
Pack Tray Stitching:	Nylon Thread, V-T-295, Type I/II, Class A, Camouflage Green #483, Size 3-C

4. **Harness Assembly, P/N 11-1-2143-1:**

Strap Material:	Nylon Webbing, PIA-W-27265, Type XIII, Class 2, 1-23/32", Camouflage Green #483, 7000# tensile strength
Strap Keeper:	Nylon Webbing, PIA-W-27265, Type VIII, Class 2, 1-23/32", Camouflage Green #483, 4000# tensile strength
Harness Stitching:	Nylon Thread, V-T-295, Type I/II, Class A, Camouflage Green #483, Size E, 5-C, 6-C

4. **Harness Assembly, P/N 11-1-2143-1: (Cont.)**

Parachute Ejector Snap: P/N MS 22017, 2500# proof load  
Canopy Release: Capewell P/N 100681 (See Page 8)  
V Ring w/Tensioner & Spring: P/N PS 27765-1, 2500# proof load  
Adapter w/Tensioner & Spring: P/N PS 70124-1; 2500# proof load  
“D” Ring: P/N 11-1-485, 5000# proof load  
Triangle Link: P/N PS22020-1, 2500# proof load

5. **Riser Assembly, P/N 11-1-2149-1; 30”:**

Strap Material: Nylon Webbing, PIA-W-27265, Type XIII, Class 2, 1-23/32”, Camouflage Green #483, 7000# tensile strength  
Keeper Material: Nylon Webbing, PIA-W-27265, Type VIII, Class 2, 1-23/32”, Camouflage Green #483, 4000#, tensile strength  
Flute Material: Nylon Tape, PIA-T-5038, Type III, Class 2, 1-1/2”, Camouflage Green #483, 850# tensile strength  
Reefing Ring Retainer Material: Nylon Webbing, PIA-W-4088, Type I, 9/16”, Camouflage Green #483, 500# tensile strength, Class 2, Condition U  
Reefing Ring: PS 27762-1, 5/8” X 1/2” X 1/4”  
Male Release: P/N 60J4328  
Riser Stitching: Nylon Thread, V-T-295, Type I/II, Class A Camouflage Green #483, Size E, 6-C  
Log Pocket Fastener: Locking type fastener, NASM 27983-1, -2, -3 and -4 Black

**Modifications to MC1-1D Assembly at Additional Cost as Noted**

1. 35 Ft. canopy can be furnished with Suspension Lines, Vent Lines, Nylon Cord PIA-C-5040, Type II, 400# tensile strength, Class F, Fluorocarbon treated (as required for all United States military contracts) at additional cost
2. Harness, P/N 11-1-2143-1, can be furnished with new Capewell Release, P/N 100681-2 with Stainless Steel Sliders (Cadmium Chromate Plated) (as required for all United States military contracts) at additional cost.

**35 FT. DIAMETER MC1-1D TROOP BACK PARACHUTE ASSEMBLY**

All MC1-1C Canopy Assemblies are manufactured using the latest revision of material listed in Technical Data and new U.S. Army material color Camouflage Green #483.

All MC1-1C Canopy Assemblies are manufactured in strict accordance with Personnel Parachute U.S. Military Specifications MIL-DTL-6645, MIL-DTL-7567 and MIL-STD-849, latest revisions.

All MC1-1C Canopy Assemblies are preserved, packaged and packed in accordance with U.S. Military Specifications or customer's specific packaging instructions.

The MC1-1C maneuverable parachute assembly designed by the United States Army in 1988 from the basic MC1-1B canopy is used primarily for a premeditated jump when a precision soft landing in a small target area is necessary. The basic canopy is the same as the MC1-1B except 1993, 1995, and 1996 drawing changes as noted are incorporated:

- 1) The cloth was changed to 0.5-5.0 CFM porosity, specification PIA-C-44378, Type I;
- 2) The old eleven (11) orifice design was revised to seventeen (17) orifices in the same 11 of the 30 gores; three (3) openings on Gore Nos. 4 and 26;
- 3) Orifices are tape reinforced horizontally on Gore Nos. 4 and 26 between upper edge at large orifice and lower edge of new lower small opening;
- 4) Shorter (22') suspension lines are arranged eight (8) lines each instead of seven (7) on the back risers;
- 5) Shorter (25') control lines are used;
- 6) The 11-3/4" length pocket bands are used instead of the old 8-3/4" length;
- 7) All material colors are new U.S. Army color Camouflage Green #483;

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**35 FT. DIAMETER MC1-1D TROOP BACK PARACHUTE ASSEMBLY (Cont.)**

- 8) Reinforcement zigzag stitching was added for main seams Nos. 6 through 25 (orifice area only) – 30” length about suspension lines;
- 9) Radial tape cut length is now cut 2-1/4” shorter (17’) to insure cloth fullness in main seam length.
- 10) A Reinforcement tape was added under each bridle line on inside of canopy – main seam #5 and #6; #25 and #26. Zigzagged stitched reinforcement on the noted main seams was to provide greater tear resistance of the canopy.

Bridle line zigzag stitching is also now backstitched 1-1/2” at beginning of line stitching.

These changes create a fast opening canopy with a gliding type descent rate of approximately 4 to 5 feet per second, with more steerability (forward drive) possible. The one disadvantage to this canopy is the higher opening shock, especially of the soldier is heavily loaded with equipment. The drawing changes of 1995 and 1996 were developed by the United States Army to reduce canopy damages from the higher opening shock and other factors. This problem area of canopy damage during deployment is being further evaluated by United States Army Engineering for possible redesign in the near future.

An additional change was made to the canopy in 2003 incorporating Fluorocarbon treated suspension and vent lines. This treatment of the nylon cord, Type II, 400# tensile strength protects the cord from collecting dirt and grit from the drop zone and increases the service life of the canopy.

The Pack Assembly P/N 62J4342 was revised in June 1995 by adding one (1) each Static Line Stow Bar to each side of present webbing loops used for stowing the Static Line. These new Stow Bars are used for additional stows at the folded ends of new 15’ Universal Static Line with or without the 5’ extension line.

When packed for service, the complete assembly weighs approximately 32 pounds. The canopy has a nominal diameter of 35 feet and a projected or inflated diameter of 24.5 feet.

The deployment bag body is made from 9 ounce Camouflage Green #483 cotton sateen, nylon webbing, cotton webbing and cotton tape. The deployment bag was revised in April 2000 to incorporate the new 15’ Universal Static Line, P/N 11-1-6993-1; 5’ Extension Static Line, P/N 11-1-6993-2; and Snap, P/N 11-1-6991. The 15’ Universal Static Line is attached around the deployment bag main strap by the service activity rigger. The snap or the 5’ extension line is looped through the opposite end by the service activity rigger depending upon the type of aircraft being used.

**35 FT. DIAMETER MC1-1D TROOP BACK PARACHUTE ASSEMBLY (Cont.)**

The body of the pack tray is made from Camouflage Green #483 nylon pack cloth and the components that are sewn to the body are made from nylon pack cloth and nylon webbing.

The harness assembly is made primarily from Type XIII Camouflage Green #483 nylon webbing. The chest, back, and leg straps permit size adjustments.

Each riser is 30 inches in length with the male fitting of the canopy release permanently attached. The risers are designed so that the control lines may be threaded through the fluted portion and are readily accessible to the jumper.

The Capewell lanyard pull release, P/N 100681, or the newer P/N 100681-2 Stainless Steel Slider (Cadmium Chromate Plated) for the canopy risers is incorporated as a safety feature, and allows quick and reliable release of the canopy when landing under high wind conditions or in the water.

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