

INVASION II

MODERN EQUIPMENT for the MODERN SOLDIER



INVASION II

MILITARY PARACHUTE HARNESS
PERSONNEL TYPE

2017

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INVASION II by Tactical Parachute Delivery Systems

INVASION II

Airborne Harness/Container System

The **Invasion II** is a complete assembly of military equipment manufactured to the highest standards using the best **Military Specification** materials available in today's market. The **Invasion II** is manufactured in the United States in a facility that is Federal Aviation Administration (**FAA**) certified for manufacturing parachute equipment.

The **Invasion II** consists of a back pack **Main Container (INV-200)** with a static line deployed round parachute and a front mounted **Reserve Container (INV-100)** with the **Invasion II Reserve Parachute (INV-300)**.

The Invasion II may be set up as a **Foreign Object Debris (F.O.D.)** free airborne system with unique Velcro attachments for Static-line deployment.

It is a "saddle" harness designed to accommodate any size jumper with any aircraft commonly used in military operations. There are seven (7) points of adjustment to the harness and three (3) easy dress-up points for quick gear-up and gear-off.

Main Container (INV-200) Capabilities and Features:

Physical Specifications:

Materials:

Main Container-

1000 Denier Nylon Cordura

Deployment Bag-

10 oz. Army Duck Fabric

Webbing:

Main Lift Webbing-

1 23/32" (4.3 cm.) wide Type 7 Mil-W-4088

Tensile Strength **6000 lbs. / 2721 kg.**

Main Risers-

1 23/32" (4.3 cm.) wide Type 7 Mil-W-4088

Tensile Strength **6000 lbs. / 2721 kg.**

Leg Straps-

1 23/32" (4.3 cm.) wide Type 7 Mil-W-4088

Tensile Strength **6000 lbs. / 2721 kg.**

Chest Strap-

1 23/32" (4.3 cm.) wide Type 8 Mil-W-4088

Tensile Strength **4000 lbs. / 1814 kg.**

Laterals-

1 23/32" (4.3 cm.) wide Type 8 Mil-W-4088

Tensile Strength **4000 lbs. / 1814 kg.**

Static Line-

3/4" (1.90 cm.) wide Tubular Mil-W-5625

Tensile Strength **2300 lbs. / 1045 kg.**



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Materials cond. :

Hardware:

Main Canopy Release System-

1 1/2 Shot Capewell Release System

Tensile Strength 5000 lbs. / 2270 kg.

Main Lift Webbing Adjusters-

Quick Fit Ring w/Friction Lock #555-2

Tensile Strength 2500 lbs. / 1130 kg.

Lateral Adjusters-

Locking Adapter PS 70124-1

Tensile Strength 2500 lbs. / 1130 kg.

Chest Strap Hardware-

B-12 PS 22044-1 or PS 22017 Quick Ejector

Tensile Strength 2500 lbs. / 1130 kg.

with "V" Ring Quick Fit Bar PS 27765

Tensile Strength 2500 lbs. / 1130 kg.

Leg Strap Hardware-

B-12 PS 22044-1 or PS 22017 Quick Ejector

Tensile Strength 2500 lbs. / 1130 kg.

with "V" Ring Quick Fit Bar PS 27765

Tensile Strength 2500 lbs. / 1130 kg.

Reserve Container Top Connector Point-

"D" Ring Angled- PS 22046-1

Tensile Strength 5000 lbs. / 2270 kg.

Static Line Snap Hook-

MS 70120

Tensile Strength 1750 lbs. / 800 kg.

Reserve Container Lower Connector-

Alligator Snap - FDC1575BO

Size:

Main Container -

17" high x 13" wide x 11" deep

43.18 cm. x 33.02 cm. x 27.94 cm.

Weight:

Main Container -

16 lbs. (7.26 kg.)

w/ Deployment Bag, Static-Line and Gear Bag

Container Colors:

Olive Drab Green

Harness Colors:

Olive Drab Green



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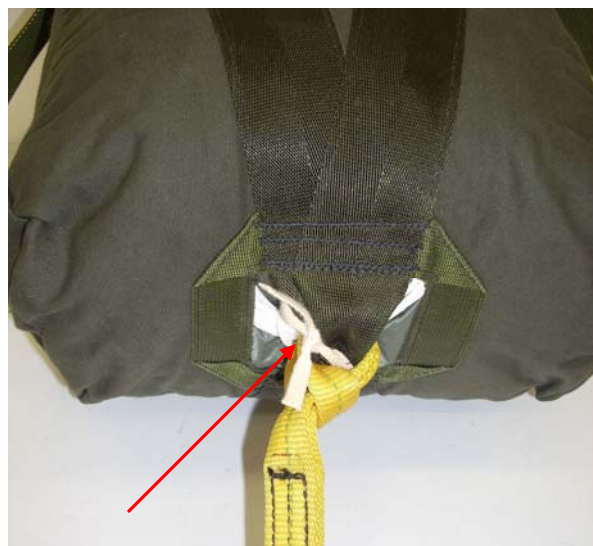
80 lbs. BREAK-TAPE MAIN CONTAINER:



80 lbs. Closing of Main Container



Riser to Deployment Bag
80 lbs. Break-tape



80 lbs. Break-tape Canopy to Deployment Bag Attachment

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Container Special Features:

7 Points of Adjustments and 3 Easy Points of Dress-up:



Harness Saddle Seat



Static-line Stow Pocket

INVASION II R

Airborne Reserve Harness/Container - (INV-100)

Physical Specifications:

Materials:

Reserve Container- 420 Denier Para Pak Nylon

Webbing:

Reserve Risers-

1 23/32" (4.3 cm.) wide Type 8 Mil-W-4088

Tensile Strength **4000 lbs. / 1814 kg.**

Lower Attachment Straps-

1" (2.54 cm.) wide Type 17 Mil-W-4088

Tensile Strength **2500 lbs. / 1134 kg.**

Tension Device-

650 lbs. (295 kg.) Flat Dacron Line

Tensile Strength **650 lbs. / 295 kg.**

Hardware:

Butterfly Snaps- PS 22042-1

Tensile Strength **5000 lbs. / 2270 kg.**

Size:

Reserve Container- 8" high x 16" wide x 8" deep
20 cm. x 40.5 cm. x 20 cm.

Weight:

Reserve Container- 3.7 lbs. (1.68 kg.)



Container Colors:

Olive Drab Green

Harness Colors:

Olive Drab Green

Ripcord:

Grip material5/16" Stainless Steel Tubing
Grip shape Cloverleaf
Cable material Flexible Steel
Number of pins 2



INVASION II Parachutes

Main Parachute:

INV-400 - 35 ft. non-steerable round

INV-401 - 42 ft. non-steerable round

INV-402 - 35 ft. steerable round

INV-403 - 42 ft. steerable round

Capabilities and Features:

The **Invasion II Main Parachute** -

A *Troop Back Parachute* with anti-inversion netting. The Invasion II Main Parachutes are parabolic canopies with anti-inversion netting in the vent slots to optimize rate of descent and minimize oscillation. All Main canopies have 28 gores and are block constructed using low porosity, high UV resistant rip-stop nylon fabric. Very little air passes through the material, resulting in slower-than-normal rate of descent and consequently softer landings, especially welcomed at higher field elevations or with heavy payloads.

The Steerable Main Parachutes (**INV-402**) & (**INV-403**) have two control lines attached to the outside suspension lines of the modifications, (line 5 and 24), to provide turning capability. The Invasion II Main Parachutes provide the capability to safely deliver airborne soldiers with individual equipment from an aircraft in-flight for vertical assault.

This system features a static line deployment of the main canopy.

The Main Parachutes are limited to use in winds not exceeding 35 knots at altitude and 16 knots at the surface.

INVASION II

Main Parachute - Non-Steerable



Performance Data

	<u>INV-400</u>	<u>INV-401</u>
Suspended Weight Range:	100-360 lbs (45-163 kg.)	200-425 lbs (91-193 kg.)
Rate of Descent:	15 fps @ 210 lbs 4 mps @ 91 kg.	13 fps @ 225 lbs. to 15 fps @ 425 lbs. 4 mps @ 102 kg. to 4.6 mps @ 193 kg.
Forward Speed:	0 mph (0 km/h)	0 mph (0 km/h)
Stability Range:	<10 angle of oscillation	<10 angle of oscillation
360° Turn:	7-8 seconds	7-8 seconds
Opening Time:	2.6 seconds at 150 kts.	2.6 seconds at 150 kts.

Physical Specifications

	<u>INV-400</u>	<u>INV-401</u>
Canopy Weight:	16 lbs. (7.26 kg.)	19.2 lbs. (8.7 kg.)
Modification:	OCV (Oscillation Control Vent)	OCV (Oscillation Control Vent)
Anti-Inversion Netting:	Yes	Yes
Fabric:	PIA-C-44378 Type IV	PIA-C-44378 Type IV
Colors:	OD Green or Foliage Green	OD Green or Foliage Green
Shape:	Parabolic	Parabolic
Diameter:	35 feet (10 m)	42 feet (13 m)
Number of Gores:	28	28
Suspension Line:	525 lbs. Polyester Braid	525 lbs. Polyester Braid
Suspension Line Length:	574.0 cm. @ 2kg./5 lbs. Tension	672.0 cm. @ 2kg./5 lbs. Tension
Suspension Line Connector Links:	MS22002-1	MS22002-1
Connector Tensile Strength:	3000 lbs. / 1360 kg.	3000 lbs. / 1360 kg.

INVASION II

Main Parachute - Steerable



Performance Data

INV-402

INV-403

Suspended Weight Range:	100-360 lbs (45-163 kg.)	200-425 lbs (91-193 kg.)
Rate of Descent:	15 fps @ 210 lbs 4 mps @ 91 kg.	13 fps @ 225 lbs. to 15 fps @ 425 lbs. 4 mps @ 102 kg. to 4.6 mps @ 193 kg.
Forward Speed:	8 –10 mph (13-16 km/h)	8 –10 mph (13-16 km/h)
Stability Range:	<10° angle of oscillation	<10° angle of oscillation
360° Turn:	7-8 seconds	7-8 seconds
Opening Time:	2.6 seconds at 150 kts.	2.6 seconds at 150 kts.

Physical Specifications

INV-402

INV-403

Canopy Weight:	16 lbs. (7.26 kg.)	20.6 lbs. (9.34 kg.)
Modification:	7-TU	7-TU
Anti-Inversion Netting:	Yes	Yes
Fabric:	PIA-C-44378	PIA-C-44378
Colors:	OD Green or Foliage Green	OD Green or Foliage Green
Shape:	Parabolic	Parabolic
Diameter:	35 feet (10 m)	42 feet (13 m)
Number of Gores:	28	28
Suspension Line:	525 lbs. Polyester Braid	525 lbs. Polyester Braid
Suspension Line Length:	574.0 cm. @ 2kg./5 lbs. Tension	672.0 cm. @ 2kg./5 lbs. Tension
Suspension Line Connector Links:	MS22002-1	MS22002-1
Connector Tensile Strength:	3000 lbs. / 1360 kg.	3000 lbs. / 1360 kg.



INVASION II

Reserve Parachute (INV-300)

Physical Specifications

Shape:	Conical
Diameter:	28 feet (8.5 m)
Canopy Weight:.....	9.9 lbs. (4.5 kg.)
Number of Gores:	24
Panels per Gore:	3
Canopy Cloth:	PIA-C-44378 Type IV
Suspension Line:525 lbs. Braided Polyester
Suspension Line Length:	555 cm. @ 2 kg./5 lbs. Tension
Suspension Line Connectors:	MS22002-1
Connector Tensile Strength:	3000 lbs. (1360 kg.)
Maximum Suspended Weight:	275 lbs. (125 kg.)

Colors:

Standard - White

Optional - OD Green

Ripcord

The Ripcord consists of a stainless steel grip and a flexible steel cable to which steel ripcord pins are swaged. The ripcord used with the **INVASION II Reserve** has two ripcord pins 1 1/4-inch in length **OR** one pin for the single pin option.

Grip material5/16" Stainless Steel Tubing
Grip shape	Cloverleaf
Cable material	Flexible Steel
Number of pins	1 or 2



INVASION II

Airborne Harness/Container System Gear Bag

Capabilities and Features:

The **Invasion II Gear Bag (INV-800)** is a light-weight, high quality and durable gear bag designed to carry the Main and Reserve Containers and Parachutes.

It is manufactured in the same facility as the Invasion II made of 1000 denier Cordura and Type 8 webbing for the handles. It stows easily in the back pad of the Invasion II Main Container to be retrieved upon landing under canopy.

The Invasion II Gear Bag comes as a standard feature of the Invasion II. Extra bags may be ordered.



The Back Pad Pocket for the Invasion II Gear Bag.



INV-800 INVASION II GEAR BAG