** INVADER ** PACKING INSTRUCTIONS



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INVADER MAIN PACKING INSTRUCTIONS

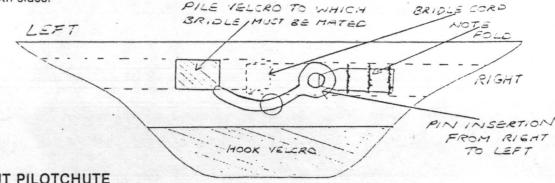
ASSEMBLY:

- Install the bag and pilotchute onto the main canopy. Make sure that the bag is free to slide up and down the bridle between 1. the top of the canopy and the bag stop on the bridle.
- Install the main risers on the canopy. Make sure you maintain line continuity. 2

THROW AWAY PILOTCHUTE

PACKING:

- Pack the deployment bag "wide". Concentrate on filling the sides and corners so that you achieve even distribution within the bag.
- 2. "Walk" on the bag until the middle is no fatter than the sides.
- Prop the bag up loosely in the container, with the lines at the bottom. Route the risers, on edge, down the sides of the 3. container, being careful not to entangle excess lines with connector links. Make sure the sheathing loop at the top of main container is not under the bag.
- Now tuck the lines well down into the container, then push the top of the bag down into place. Clear the risers and toggles down around reserve.
- Kneel on the centre of the bag and pull up on the side flaps until the back of the bag is flush with the back of the reserve 5. container and the entire unit will present a streamline profile.
- Kneel on the floor facing the bottom of the bag. 6.
- 7. Insert pull-cord through the sheathing loop first, then the bottom flap and pull up towards reserve, then kneel on sheathing loop to hold in position. Keep the pilotchute bridle to left of loop.
- Close left then right side flaps by pushing down deployment bag under flap with one hand and pulling flap sideways and up 8. with pull up. Make sure main bridle remains on left and comes out just near the sheathing loop.
- Lastly, close top flap by lifting main container upward and then pulling downwards towards bottom of container. Insert 9. curved pin from right to left and mate the velcro on bridle to small patch of velcro just above top flap grommet. (See diagram).
- 10. Next mate the two velcro strips on the bridle with their corresponding pieces on the bottom main flap and the side of the harness and container.
- Stand rig on its side and pull the top flap velcro tabs down and mate with velcro on side flaps. Dress up riser covers at same 11. time on both sides.



PULL OUT PILOTCHUTE B.

- Follow instructions as below up to Step No. 6. Then fold pilotchute as described in packing of pull out pilotchute. 1.
- Lay the narrow triangled pilotchute on top of the deployment bag with the pointed side (or apex with pin attachment) 2. positioned down in the bottom right hand corner of the main container.
- 3. Continue to follow instructions as in (A) No. 7 through No. 9 except here a straight pin is inserted.
- Insert pull out handle into webb holder (bottom) and then flex and insert top into elastic holder with bridle underneath of 4 handle to make sure the little tab is positioned just to the right and top of elastic holder and that the velcro is mated.
- 5 Position pin and tuck the pull out bridle under the right hand flap.
- Position rig on side and dress and mate velcro riser covers, also pull down and mate the middle flap velcro on both sides of 6. the flap.

Note: It may be necessary to adjust the length of the sheathing loop to achieve the best fit of the side flaps to the top main flap.

PACKING THE INVADER PILOTCHUTE: THROW AWAY

Note: The Invader pilotchute pouch will accept ONLY the Invader pilotchute or a special 75 cm conventional type hand deploy pilotchute.

- 1. Lay the pilotchute out flat, mesh side up.
- Fold the pilotchute in half over the bridle. The part of the bridle above the velcro should be stowed completely inside the folded halves.

- 3. Fold the corners up to the centre of the arc to form a triangle.
- 4. Fold the corners in again, making a narrow triangle.
- 5. Fold again, making a wedge that is about 7,5 cm wide at the base.
- 6. Fold the wedge in half, bring the apex over so that the top of the handle is even with the skirt.
- 7. Insert the folded end all the way into the pouch so that only the plastic handle is even with the skirt.
- *** Practice this procedure on the ground a few times. Put the rig on and tighten the harness and practice "throwing" the pilotchute correctly.

INVADER RESERVE PACKING INSTRUCTIONS

REQUIRED TOOLS: One temporary pin

One pull-up cord (120 cm of 550 Sheathing)

One packing paddle

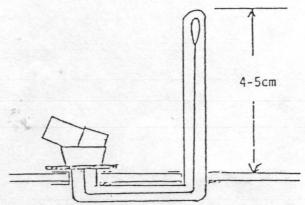
NOTES:

- (a) For ease of packing the reserve flaps are numbered 1 6 for reference and are closed in that sequence.
- (b) Read ALL of these instructions carefully BEFORE you start to pack your own reserve. They contain many tips on technique that will enable you to obtain the best looking pack job on your INVADER.

PART ONE

- 1. Attach the canopy to the risers with the steering modifications and/or information panel facing to the wearers rear. Insure that the connector links are thoroughly tightened.
- Follow the canopy manufacturer's instructions to install any steering lines, toggles or similar items.
- 3. Attach the Invader Reserve Pilotchute to the apex of the canopy using the Type IV bridle provided with the vector. Do not substitute other bridles. The length of this bridle is important for fast deployment.
- 4. Inspect and flake the Reserve Canopy according to the manufacturer's instructions. If your reserve DOES NOT have a diaper or other deployment device, fold the skirt up parallel to the radial seams and then long fold the canopy into fifths.
- 5. If your canopy is equipped with a diaper or similar device, close it according to the manufacturer's instructions.
- 6. Place the reserve risers into the reserve container with the ends between the line stow loops and the grommet stiffener plate.
- 7. Make the first stow of suspension lines at the bottom and stow upwards towards the centre packing wide to fill all space to the sides. If your canopy has a diaper whereby the lines are stowed into it, then do so accordingly instead of stowing them in the pack tray.
- 8. At this point, check the length of the reserve closing loop. The length from the stiffener plate to the end of the loop should measure approximately 4,5 cm for the K-XX and Featherlite canopies and Phantom. For other canopies, the loop will have to be lengthened accordingly. These lengths will vary from individual to individual and according to how much effort you put into the pack job.

The final criteria as to correct loop length is that it should not take an excessive amount of effort to close the last (No. 6) flap nor should there be more than 6 mm of give if you push down on the pilotchute when the container is closed. Once the rig has been packed for a while and/or the loop has stretched, the loop may be shortened accordingly if there is excessive play in the spring.



9. Insert the pull-up cord in reserve closing loop.

PART TWO

- 1. Place the canopy skirt at the bottom (left or right) of the container into the corner. For canopies with a two grommet (Strong) diaper, the skirt may be laid on its side to start with. For those canopies such as a Preserve III with a full diaper, they should be laid flat. With a Piglet style diaper such as a Featherlite, about 1/3 of the diaper should be folded lengthwise so that the fold lays against the wall between the main and reserve containers.
- 2. For canopies with a strong style diaper, the canopy can now be "S" folded beside itself the width of the container up to the top of the container. For canopies with full diapers such as the PRESERVE III and the FEATHERLITE and PHANTOM, a short fold or two must be made in the opposite corner from the skirt to even out the bulk. The next fold can be spread out on top of the diaper to give the container its proper thickness. From there, the rest of the canopy is "S" folded side-by-side to the top of the container.
- 3. Next the closing loop and pull-up cord must be routed up through the folds in the canopy. For the best appearance, it is best not to have more than two folds above the loop. With ultra-small canopies such as the K-XX and Featherlite and Phantom this works well. However, with the larger volume canopies such as Strong Lopo-Lite or Pioneer K-XXII, it may be necessary to place more materials above the loop. Also with the larger canopies, it may be necessary to lengthen the loop.

PART THREE

- 1. Close flap No. 1 first and lock with a temporary pin. Make sure the canopy folds above the loop are 2,5 cm wider than the container. This is to make sure that the side flaps are not loose when packed.
- 2. Next route the reserve bridle towards the bottom of the container and close flap No. 2, locking it with a temporary pin.
- 3. Route the pull-up cord through the bottom of the pilotchute and out the top. "S" fold the bridle side-to-side on top of the No. 2 flap just below the loop so that it will be under the base of the pilotchute but not interfere with the loop.
- 4. Make sure the base of the pilotchute is centered over the loop and then compress the pilotchute and lock it with your temporary pin.
- 5. Pull all of the canopy fabric out from between the spring. At this time fully compress the spring to see how much excess loop you can pull through the top of the pilotchute. If you can pull more than 12 mm 18 mm through, your loop is already too long. Now would be the best time to open the container and shorten the loop. With the fabric pulled clear, you can see clearly inside the pilotchute to see if the base is still centered.
- 6. Next lay the fabric flat all around the pilotchute and fold the side under in wide folds to the centre.
- 7. Fold the top and bottom under to the centre the same as the sides.

PART FOUR

- 1. Thread the pull-up cord through the flaps No. 3 and No. 4 and close and lock with a temporary pin. Make sure that the folds in the pilotchute stay flat and neat.
- 2. Thread the pull-up cord through flap No. 5 and close and lock.
- 3. Thread the pull-up cord through flap No. 6 and close and lock. If the force necessary to close the last flaps seems excessive, you loop may be too short. Check the pull with a Fish scale. With a proper canopy, pack job and loop length, we obtained a consistent 3,5 kg 5,5 kg pull force.
- 4. Thread the ripcord through the housing and replace the temporary pin with a ripcord pin.
- 5. Dress the container and seal and log the reserve. Count your tools.

NOTE:

We found that at this point, we place the Invader reserve on the floor on its back with the backpad facing up and walked on it with out bare feet, "kneading" the reserve so to speak. This will work any excess air out of the container and it is easy to "feel" the distribution of canopy within the container and determine if it is a "good" pack job.

INVADER RESERVE PACKING INSTRUCTIONS FOR A RAM AIR RESERVE

Packing a Ram-Air reserve into an Invader using an Invader / bridle / pilotchute assembly requires a slightly modified version of the packing instructions that was deployed by Para-Flight Inc., for use with their Safety-Flyer reserve system. The end result of the modification allows packing the reserve with a loop through the middle of the bag. This is accomplished by one "S" fold of canopy across the top of the bag above the loop, and the remainder of the canopy is "stack packed" in the bottom of the bag below the loop.

REQUIRED TOOLS: One temporary pin

One pull-up cord (very long - approximately 180 cm)

One packing paddle

Follow canopy manufacturer's instructions pertaining to:

- Attaching the canopy to risers.
- 2. Attaching toggles and/or steering lines.
- 3. Flaking the canopy.
- 4. Folding the nose and canopy.
- 5. Setting deployment brakes.
- 6. "Splitting" the tail.
- 7. Stowing slider.
- 8. "Dressing" the canopy.

At this point, you are ready to place the canopy in the deployment bag and everything up to this stage should have followed the manufacturer's instruction exactly. Refer to diagram No. 1 showing the relationship of the canopy to the bag and orientate yourself to the terms TOP, BOTTOM, LEFT and RIGHT.

Facing the TOP of the canopy and straddling the lines, kneel, placing your knees on the edge of the tail and the BOTTOM of the canopy.

Reach underneath the canopy and fold it all back into your lap, exposing the folded nose. Make sure the nose of the canopy is clear and all 5 (or 7) cells are exposed.

Grasp the TOP RIGHT corner of the flaked canopy and fold it across and down to the LEFT side, making the top of the canopy a 45° angle. Be sure not to cover the exposed nose. Lay the canopy back on the table. See diagram No. 2.

Inspect the free bag / bridle / pilotchute for wear. If there is a problem, proceed no further and contact PARACHUTE SERVICES LIMITED immediately. Inspect the loop in the reserve container for wear and replace if necessary. Inspect the rest of the container.

Place one end of the pull-up cord through the grommets in the top and bottom of the bag. Tie it to the other end.

Kneeling as before, grasp the TOP LEFT corner of the flaked canopy and going around to the right of the pull-up cord, place the corner of the canopy into the TOP LEFT corner of the bag. Be sure to fill the corner. Refer to diagrams No. 3, No. 4 & No. 5.

Without pulling the LEFT corner free, reach over the canopy in the bag and then underneath the canopy and extract the previously folded RIGHT corner of the canopy. Manoeuver this corner of the canopy into TOP RIGHT corner of the bag. Be sure to fill the corner. Refer to diagram No. 6 and No. 7.

Place another knot in the pull-up cord so that it is pulled tight and the grommets in the top and bottom are no more than 2,5 cm apart. This ensures the TOP of the canopy wil stay in the bag throughout the rest of the packing procedures. Dress the remaining canopy to a width 5 cm wider than the bag on each side. See diagram No. 8.

Making very short folds, no longer than the distance from the mouth of the bag to the pull-up cord, stack the canopy on top of itself. Be careful that the top of the canopy does not come out of the bag. See diagram No. 9.

Gently place the stacked canopy into the bag. Close the bag with two locking stows and place the remainder of the lines neatly into the storage pouch.

With the lines to the TOP of the container, place the bagged reserve on top of the main container. Position the reserve risers in the container with the rear risers to the outside and the front risers just inside these.

Untie the pull-up cord. DO NOT pull it out of the bag. Take the end coming from the grommet on the line stow pouch side of the bag now on top, thread it through the closing loop, and tie a bowline (or other non-slip) knot about 15 cm above the loop. Lay the bag in the reserve container with the lines at the BOTTOM of the container. Push the corners in all the way till the grommets in the bag are on top of the grommet in the bottom of the container. Pull the pull-up cord until the knot is exposed. Untie the knot and pull the cord until the ends are together. Be careful not to pull the wrong end. If you pull the cord out of the closing loop, take the canopy out of the bag and start over.

Pull the closing loop through the bag and pin it with a temporary pin. Close the No. 1 (BOTTOM) and No. 2 (TOP) flaps and pin them. The bridle should come out between these two flaps. Place the bridle on top No. 1 and No. 2 flaps from the TOP to BOTTOM as in diagram No. 10.

Route the pull-up cord through the bottom of the pilotchute and out the top. Make sure the base of the pilotchute is centred over the loop and then compress the pilotchute and lock it with you temporary pin. Pull all of the canopy fabric out from between the spring coils. Fully compress the spring to see how much excess loop you can full through the top of the pilotchute. If you can pull more than 12 mm - 18 mm through, your loop is already too long. Now would be the best time to open the container and shorten the loop. The loop length for a swift reserve should be + 5 to 5,5 cm long.

With the fabric pulled clear, you can see clearly inside the pilotchute to see if the base is still centred. Lay the fabric flat all around the pilotchute and fold the sides under in wide folds to the centre. Fold the top and bottom under to the centre the same as the sides.

Thread the pull-up cord through flaps No. 3 and No. 4 and close and lock with a temporary pin. Make sure that the folds in the pilotchute stay flat and neat.

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