## SOFTIE's

# by PARA-PHERNALIA, INC.

# OWNERS MANUAL / PACKING INSTRUCTIONS

# PACKING INSTRUCTION SUPPLEMENT FOR SQUARE PARACHUTES

#### **DATED MATERIAL**

15 December 1996

#### THIS DOCUMENT SUPERCEDES ALL PREVIOUS INSTRUCTIONS

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THIS DOCUMENT IS TO BE USED IN CONJUNCTION WITH THE SOFTIE PACKING INSTRUCTIONS AS A GUIDE TO PACKING A SQUARE PARACHUTE INTO A SOFTIE SQUARE PARACHUTE FREEBAG AND SOFTIE CONTAINER SYSTEM. REFER TO FIGURE 1 IN THE SOFTIE OWNERS MANUAL/PACKING INSTRUCTIONS FOR INSTALLATION OF THE GROMMET STRAP ON THE PILOT CHUTE. FAILURE TO INSTALLA GROMMET STRAP ON THE PILOT CHUTE VOIDS THE TSO.

AN FAA SENIOR OR MASTER PARACHUTE RIGGER CERTIFICATE IS REQUIRED TO PACK ANY EMERGENCY PARACHUTE THAT WILL BE USED IN THE U.S.A..

DUE TO THE DIVERSITY OF SQUARE EMERGENCY PARACHUTES AVAILABLE FOR USE, NO INSTRUCTIONS FOR INSPECTION AND ASSEMBLY ARE INCLUDED IN THIS DOCUMENT. THE RIGGER MUST FOLLOW THE PARACHUTE CANOPY MANUFACTURERS INSTRUCTIONS FOR INSPECTION AND ASSEMBLY PROCEDURES.

ALTHOUGH OTHER METHODS OF FOLDING SQUARE PARACHUTE CANOPIES WILL ALSO YIELD SATISFACTORY RESULTS, THE METHOD DESCRIBED HEREIN IS PREFERRED FOR USE WITH THE SOFTIE FREEBAG, BRIDLE AND CONTAINER SYSTEM.

THERE IS NO USERS MANUAL PROVIDED WITH THIS SUPPLEMENT. A COMPLETE TRAINING PROGRAM IN THE USE OF SQUARE PARACHUTES IS REQUIRED BEFORE EMPLOYING THE USE OF A SOFTIE WITH A SQUARE PARACHUTE. USING A SOFTIE PACKED WITH A SQUARE PARACHUTE WITHOUT THE PROPER TRAINING IS STRICTLY FORBIDDEN

## **DISCLAIMER NO-WARRANTY**

NOTICE! ALL STATEMENTS, TECHNICAL ADVICE, AND RECOMMENDATIONS CONTAINED HEREIN ARE BASED ON TESTS BELIEVED TO BE RELIABLE, BUT THE ACCURACY THEREOF IS NOT GUARANTEED, AND THE FOLLOWING IS MADE IN LIEU OF ALL WARRANTIES EXPRESSED OR IMPLIED:

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# **TOOLS REQUIRED**

- 1.) 6" ADJUSTABLE WRENCH
- 2.) 2ea TEMPORARY PINS WITH FLAGS
- 3.) 1ea PACKING PADDLE
- 4.) 2ea PULL-UP CORDS (Gutted 550) 40" LONG
- 5.) 2ea POP-TOP T-BAR (Slotted Bodkin)

## **PREPARATION**

BEGIN BY VERIFYING THE VOLUME OF THE RAM AIR PARACHUTE AGAINST THE VOLUME OF THE PARACHUTE FREEBAG AND CONTAINER. RECORD THE PARACHUTE CANOPY SERIAL NUMBER, MANUFACTURERS IDENTIFICATION, AND THE DATE OF MANUFACTURE ON THE PACKING DATA CARD.

## WARNING LABEL

IT IS THE RESPONSIBILITY OF THE PARACHUTE RIGGER TO THOROUGHLY READ AND UNDERSTAND THIS AND ALL DOCUMENTS RELATED TO THE SYSTEM BEING PACKED. ITEM #4 ON THE WARNING LABEL INSTRUCTS THE RIGGER TO FILL IN ALL BLANK DATA.

## **INSPECTION**

THOROUGHLY INSPECT THE PILOT CHUTE, BRIDLE, FREEBAG, PARACHUTE CANOPY, SLIDER, LINES, LINKS, TOGGLES, RISERS, LOCKING LOOP, HARDWARE, GROMMETS, CABLE HOUSING, RIPCORD, HARNESS AND CONTAINER.

#### **ASSEMBLY**

FOLLOW THE MANUFACTURERS INSTRUCTIONS FOR ATTACHING THE PARACHUTE CANOPY TO THE RISERS AND THE STEERING LINES TO THE TOGGLES. (THE SOFTIE TOGGLE SYSTEM MAY BE USED WITH MOST PARACHUTE CANOPIES. CONSULT THE CANOPY MANUFACTURER'S SPECIFIC INSTRUCTIONS FOR COMPATIBILITY.)

ATTACH THE PILOT CHUTE TO THE FREEBAG BRIDLE WITH A LARKS HEAD KNOT. NO TACKING IS REQUIRED.

INSTALL THE CLOSING LOOP IN THE CONTAINER. (ACCESS TO THE CLOSING LOOP STIFFENER PLATE IS LOCATED AT THE TOP EDGE OF THE PACK TRAY IN THE CENTER OF THE CONTAINER.) INSTALL THE 40" PULL-UP CORDS IN THE ENDS OF THE CLOSING LOOP.

## **BEGIN FOLDING**

- 1. LAY THE CANOPY NEATLY ON ITS RIGHT SIDE, KEEP THE TOP-SKIN AND LINE GROUPS UNIFORM AND EVEN. SPLIT THE NOSE OF THE CANOPY. (FOLD 3 CELLS UNDER AND LEAVE 4 CELLS LAYING FLAT.) (SEE FIG. 1) NOTE: THESE INSTRUCTIONS DESCRIBE PACKING WITH THE RIGHT SIDE OF THE CANOPY DOWN, HOWEVER, IT MAY BE DONE RIGHT OR LEFT DOWN DEPENDING ON PREFERENCE OR MANUFACTURERS INSTRUCTIONS.
- 2. SET THE BRAKES BY PULLING THE FINGERTRAP DOWN THROUGH THE GUIDE RING (RW-3 OR RW-4.) PLACE THE LOCKING LOOP THROUGH THE FINGERTRAP AND THROUGH THE GUIDE RING. INSERT ~1" OF THE STIFFENED END OF THE \*STEERING TOGGLE THROUGH THE LOCKING LOOP. "S" FOLD THE EXCESS STEERING LINE AND STOW BETWEEN THE TOGGLE AND THE RISER. SECURE THE TOGGLE TO THE RISER BY MATING THE VELCRO.(SEE FIG. 2) \*SEE PAGE 1 FOR TOGGLE ASSEMBLY.
- 3. KNEEL AT THE TOP OF THE CANOPY, GRASP THE TOP 4 CELLS WITH YOUR RIGHT HAND HALFWAY BETWEEN LINE GROUPS A AND B. (LEFT HALF OF THE CANOPY) GRASP ALL 7 CELLS WITH YOUR LEFT HAND DIRECTLY ABOVE GROUP B. MAINTAINING A CONSTANT DISTANCE BETWEEN YOUR HANDS, RAISE THE CANOPY ABOUT 10" OFF THE FLOOR AND MOVE IT TO THE RIGHT UNTIL LINE GROUPS A AND B ARE IN LINE. (SEE FIG. 3-4) BE SURE TO MAINTAIN AN EVEN TENSION IN ALL THE LINES WHILE MAKING THESE FOLDS. NOTE: IT IS ASSUMED THAT A 7 CELL CANOPY IS BEING PACKED.
- 4. REPEAT STEP 3. FOR FOLDS BETWEEN LINE GROUPS B AND C, EXCEPT, GRASP THE TOP 3 CELLS WITH YOUR RIGHT HAND. (SEE FIG. 3-4)
- 5. REPEAT STEP 3. FOR FOLDS BETWEEN LINE GROUPS C AND D, ONCE AGAIN GRASPING THE TOP 4 CELLS WITH YOUR RIGHT HAND. (SEE FIG. 3-4)
- 6. SPREAD THE TAIL OF THE CANOPY TO EXPOSE THE WIND CHANNEL. WHILE CLEARING THE STABILIZER PANELS, CONFIRM THAT THE FOLDS BETWEEN LINE GROUPS ARE NEAT AND CONTINUOUS BETWEEN THE TOP AND THE BOTTOM SURFACES OF THE CANOPY. (SEE FIG. 5)
- 7. AT THIS TIME CONFIRM THAT ALL THE LINES AND ATTACHMENT POINTS ARE LOCATED AT THE CENTER OF THE OF THE STACK (WIND CHANNEL.)

- 8. FLAKE AND SPLIT THE TAIL OF THE CANOPY ACCORDING TO THE CANOPY MANUFACTURER'S INSTRUCTIONS. (WHERE PRO-PACK IS INDICATED, NOTE THAT THE END RESULT IS THE SAME AS THE METHOD SHOWN HERE.)
- 9. STOW THE SLIDER ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS. (FIG. 6)
- 10. KNEELING ON THE TRAILING EDGE AND FACING THE TOP OF THE CANOPY, SPLIT THE TOP OF THE CANOPY INTO TWO SECTIONS MUCH LIKE THE SHAPE OF A MOLAR TOOTH. (SEE FIG. 7) (IT IS VERY EASY TO SPLIT THE TOP OF THE CANOPY IF YOU FOLLOW THESE INSTRUCTIONS PROPERLY.)
- 11. NEATLY DRESS THE CANOPY TO A WIDTH ABOUT 4" WIDER THAN THE BAG. (SEE FIG. 7)

# FILLING THE FREEBAG

- 12. INSERT A POP-TOP TOOL THROUGH THE UPPER "O" GROMMET IN THE TOP FACE OF THE FREEBAG AND OUT THROUGH THE UPPER "O" GROMMET IN THE LOWER FACE OF THE FREEBAG. WRAPA STOW BAND SEVERAL TIMES AROUND THE END OF THE POP-TOP TOOL TO KEEP IT FROM SLIPPING OUT OF THE GROMMETS. (SEE FIG. 9)
- 13.CAREFULLY SLIDE THE FREEBAG OVER THE CANOPY, FILLING THE UPPERMOST PORTION OF THE FREEBAG WITH THE TWO SPLIT SECTIONS OF THE TOP OF THE CANOPY. ONE SECTION ON EITHER SIDE OF THE POP-TOP TOOL. BE SURE TO FILL THE CORNERS OF THE FREEBAG FIRMLY WITH CANOPY MATERIAL. (SEE FIG. 9)
- 14. LIFT THE CENTER OF THE SLIDER AND SEPARATE THE TWO HALVES OF THE CANOPY FROM THE SLIDER-GROMMETS TO THE BOTTOM SKIN, THIS WILL CREATE A CHANNEL THROUGH WHICH THE LOWER LOCKING LOOP WILL PASS. LAY THE SLIDER BACK DOWN IN ITS NORMAL POSITION.
- 15. PUSH THE CANOPY MATERIAL UP INTO THE FREEBAG UNTIL THE "O" GROMMET IN THE BOTTOM FACE OF THE FREEBAG IS EXPOSED. (SEE FIG. 10)
- 16. INSERT THE POP-TOP TOOL THROUGH THE LOWER "O" GROMMET IN THE FACE OF THE FREEBAG DOWN THROUGH THE SPLIT BETWEEN THE TWO HALVES OF THE CANOPY AND OUT THROUGH THE "O" GROMMET IN THE BOTTOM FACE OF THE FREEBAG. WRAP A STOW BAND AROUND THE END OF THE POP-TOP TOOL. (SEE FIG. 8)
- 17. STACK FOLD THE REMAINING CANOPY AND SLIDER INTO THE LOWER

#### PORTION OF THE FREEBAG.

- 18. CLOSE THE FREEBAG LOCKING FLAP WITH TWO SHORT BITES (1" 2") OF THE SUSPENSION LINE IN THE ELASTIC SAFETY STOW. (SEE FIG. 11)
- 19. STOW THE REMAINING SUSPENSION LINE IN THE LINE STOW POUCH AND MATE THE VELCRO. BE SURE TO LEAVE ENOUGH LINE OUT OF THE POUCH TO REACH FROM THE BOTTOM OF THE FREEBAG TO THE ENDS OF THE RISERS.

#### INSTALLING THE FREEBAG IN THE CONTAINER

- 20. PICK UP THE PACKED FREEBAG AND MOVE IT DIRECTLY OVER TO THE CONTAINER AS IT LAYS. DO NOT FLIP IT OVER OR TURN IT AROUND.
- 21. LIFT ONE SIDE OF THE FREEBAG AND REMOVE THE RUBBER BANDS FROM THE POP-TOP TOOLS. NOW THREAD THE ENDS OF THE PREVIOUSLY INSTALLED PULL-UP CORDS THROUGH THE ENDS OF THE POP-TOP TOOLS.
- 22. LAY THE FREEBAG BACK DOWN IN THE CONTAINER AND CAREFULLY PULL THE CORDS THROUGH THE GROMMET WITH THE POP-TOP TOOLS. REMOVE THE POP-TOP TOOLS FROM THE PULL-UP CORDS.

#### CLOSING THE CONTAINER

- 23. CLOSE THE BOTTOM FLAP OF THE CONTAINER BY INSERTING THE BOTTOM GROMMET PULL-UP CORD THROUGH THE GROMMET IN THE BOTTOM FLAP.
- 24. CLOSE THE TOP FLAP BY INSERTING THE TOP GROMMET PULL-UP CORD IN THE PACK TRAY, THROUGH THE TOP GROMMET OF THE TOP FLAP. NEXT, INSERT THE BOTTOM GROMMET PULL-UP CORD FROM THE BOTTOM FLAP THROUGH THE BOTTOM GROMMET OF THE TOP FLAP. INSERT A TEMPORARY PIN IN EACH END OF THE CLOSING LOOP TO HOLD THE CONTAINER CLOSED.
- 25. NEATLY STOW THE PILOT CHUTE BRIDLE BY "S" FOLDING ACROSS THE FULL WIDTH OF THE CONTAINER, AND BETWEEN THE TWO TEMPORARY PINS. PLACE THE BASE OF THE PILOT CHUTE ON TOP OF THE STOWED BRIDLE AND COMPRESS IT INTO THE SPACE BETWEEN THE TEMPORARY PINS. BE SURE TO TRAP ALL OF THE PILOT CHUTE CANOPY FABRIC AND MESH BETWEEN THE COILS OF THE SPRING SO THEY WILL NOT INTERFERE WITH THE DEPLOYMENT OF THE PILOT CHUTE OR WITH THE PASSAGE OF THE CLOSING LOOP THROUGH THE GROMMETS. INSERT THE PULL-UP CORDS THROUGH THE GROMMETS IN THE PILOT CHUTE GROMMET STRAP AND PULL THE CLOSING

LOOP UP THROUGH EACH GROMMET. REMOVE AND REPLACE THE TEMPORARY PINS IN THE CLOSING LOOP TO SECURE THE COMPRESSED PILOT CHUTE

- 26. MATE ALL VELCRO ON THE TOP FLAP, BOTTOM FLAP AND RISER COVERS.
- 27. CLOSE THE RIGHT SIDE FLAP BY INSERTING THE TOP GROMMET PULL-UP CORD OF THE TOP FLAP THROUGH THE TOP GROMMET ON THE RIGHT SIDE FLAP. NEXT, INSERT THE BOTTOM GROMMET PULL-UP CORD OF THE TOP FLAP THROUGH THE BOTTOM GROMMET OF THE RIGHT SIDE FLAP. REMOVE THE TEMPORARY PINS AND RE-INSERT THROUGH THE CLOSING LOOPS OF THE RIGHT SIDE FLAP GROMMETS.
- 28. CLOSE THE LEFT SIDE FLAP BY INSERTING THE BOTTOM GROMMET PULL-UP CORD OF THE RIGHT SIDE FLAP THROUGH THE BOTTOM GROMMET OF THE LEFT SIDE FLAP INSTALL THE RIPCORD PIN. NEXT INSERT THE TOP GROMMET PULL-UP CORD OF THE RIGHT SIDE FLAP THROUGH THE TOP GROMMET OF THE LEFT SIDE FLAP -REMOVE THE TEMPORARY PINS INSTALL THE RIPCORD PINS.
- 29. APPLY A RIGGERS SEAL IN THE ACCEPTED FASHION. COUNT YOUR TOOLS BEFORE AND AFTER PACKING PREFERABLY USING THE CHECK LIST AT THE BEGINNING OF THIS DOCUMENT.

NOTICE: MAKE SURE YOU HAVE REMOVED ALL OF THE TOOLS FROM THE CONTAINER. THE EMPHASIS PLACED ON EACH USE OF THE TERM TEMPORARY PIN(S) HAS BEEN ADDED AS A REMINDER, - ALWAYS KEEP TEMPORARY PINS HIGHLY VISIBLE UNTIL THEY ARE REMOVED.

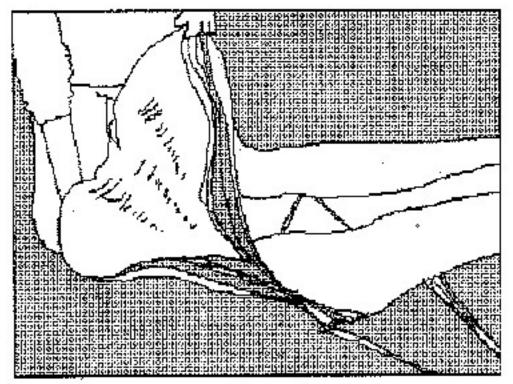
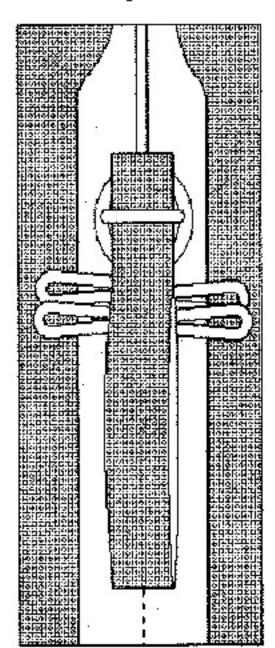
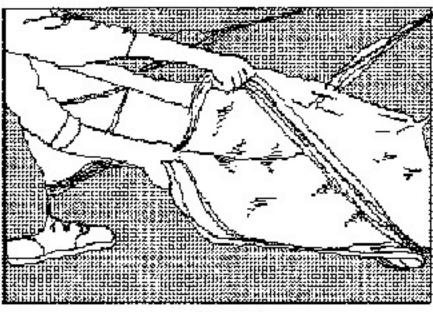


Figure 1





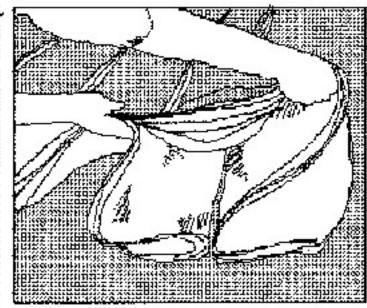
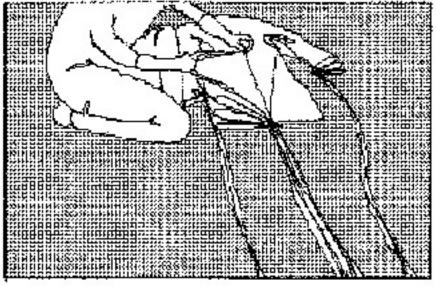


Figure 3 Figure 4



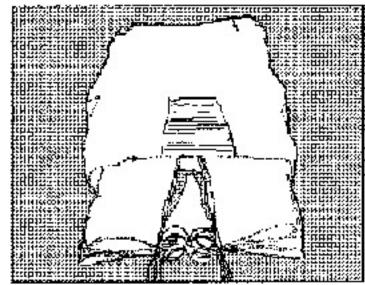


Figure 5 Figure 6

