



# OWNER'S MANUAL AND PACKING INSTRUCTIONS

# WARNING!

1. Training and/or experience are required to lower the risk of serious bodily injury or death.

**NEVER** use this equipment unless you have:

A. Read the warning label and completed a "controlled program of instruction" in the use of this parachute assembly.

- OR-

- B. Read the warning label and all appropriate owners / flight manuals, packing instructions and completed at least 100 ram-air parachute jumps.
- 2. Lower the risk of death, serious injury, canopy damage and hard openings by never exceeding the limits shown on the warning label.

Warning labels may be found in the following locations:

Ram-Air parachute- center cell top skin at trailing edge.

### **Warranty**

PARACHUTES AUSTRALIA expressly warrants that these goods will be free from defects arising from faulty material and workmanship. The liability of Parachutes Australia is limited to the replacement of defective parts found upon examination to be defective in material or workmanship within 6 months of purchase. This warranty does not apply to goods which have:

- a) Not being used in accordance with the express or implied instructions and specifications of Parachutes Australia .
- b) Altered or repaired in any way.
- c) Been subjected to abuse, misuse, abnormal stress or strain, or neglect of any kind.
- d) Become directly or indirectly defective from wear and tear.
- e) Been used after the discovery of any defect or defiance which has not been rectified by Parachutes Australia after the purchaser has notice of such defect or deficiency. Parachute Australia will not accept goods returned without prior arrangement.

# !!! WARNING !!!

You can substantially reduce risk by assuring that each component of the system has been assembled and packed in strict compliance with the manufacturer's instructions, by obtaining proper instruction in the use of this system, and by operating each component of the system in strict compliance with owner's manual. However, parachute systems sometimes fail to operate properly even when properly assembled, packed and operated so that you risk serious injury or death each time you use the system.

DANGER Each time you use this parachute system you risk serious bodily injury or death.

DANGER

### 7ELESIS 2 P/N 6113- (2)

<i>S/N</i>	
DATE OF MANUFACTURE: _	 
REVISION:	
DATE:	

### Manufactured by:-

Parachutes Australia 35/317 Woodpark Road, Smithfield NSW Australia 2164

Telephone: (02) 97572355

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This manual designed and produced by PARACHUTES AUSTRALIA

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# Section 1.0 General Information

### 7elesis 2 Certification

Several different levels of TSO certification are in use today. Older parachute systems are built under TSO C23b in the Low Speed Category. Newer systems are built under TSO C-23c in either Category A, B, or C depending upon weight and speed limits. The 7ELES9S 2 is built to standards prescribed under TSO C-23c Category B.

The 7ELES95 2 harness and container systems are approved under FAA TSO-C23c, Category B: and limited to use by persons up to 116 kg (254 lb.) fully equipped, and up to 130 knots.



NORTHWEST MOUNTAIN REGION
TRANSPORT AIRPLANE DIRECTORATE
AIRCRAFT CERTIFICATION SERVICE
LOS ANGELES AIRCRAFT CERTIFICATION OFFICE
3229 E SPRING ST.
LONG BEACH, CA 90806-2425

of Transportation

Federal Aviation

**Administration** 

AUG. 7, 1989

Rigging Innovations Inc. Mr. Sandy R. Reid, President 236-A E. Third St. Perris, CA 92370

Gentlemen:

Rigging Innovations Inc., Telesis 2 Dual Parachute Harness & Container Assembly, Part Number 6113-( ); Series; Technical Standard Order C23c

Your application of June 14, 1989, requesting the issuance of a Technical Standard Order (TSO) authorisation in accordance with the procedural requirements of Federal Aviation Regulation (FAR) Part 21, Subvert O, has been reviewed. Based upon your data and statement of conformance certifying your article has met the requirements of FAR Part 21, Subpart O, and the minimum performance standards of TSO-C23c (Ref. FAR 21.305(b)) authorisation is hereby granted.

The following technical data are considered to fulfil the requirements for TSO authorisation and are being retained in our files:

- 1. Qualification Test Report SAE8015A Test Summary Per AS8015A
- 2. Marking Requirements dated May, 1989
- 3. Owners Manual P/N 6113-( ) dated May, 1989

The quality control procedures contained in your quality control manual currently on file at the Manufacturing Inspection District Office and your statement that those procedures will be applied to the manufacture of subject articles at the above address, are considered adequate in accordance with FAR 21.143.

Effective this date you are authorised to use TSO procedures is extended to include the subject Telesis 2 Dual Parachute Harness and Container Assembly and you may identify this article with the applicable TSO markings as required by TSO-C23c.

In accordance with the provisions of FAR 21.3, you are required to report to the FAA any failure, malfunction, of defect related to your TSO. authorisation. As required by 21.613(b), you must also notify the FAA when you no longer manufacture a TSO approved article.

This authorisation pertains only to manufacturing operations at the above address and this office must be notified in advance of any proposed relocation to preclude interruption while awaiting quality control approval of your new facility

Sincerely,

Sincerely,

Frederick Lee

Manager, Los Angeles Aircraft

Certification Office

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### Rigger Qualifications

To pack and maintain this parachute system, the *FAA Senior or Master Rigger - or foreign equivalent -* must possess a BACK rating endorsement to his or her certificate. Since **these systems are certified only with square reserve parachutes** the rigger should be appropriately trained to pack ram-air parachutes prior to certifying the *Televis 2* system for emergency use.

### FAR Part 65.127() No certificated parachute rigger may -

- (e) Pack, maintain, or alter a parachute in any manner that deviates from the procedures approved by the administrator OR the manufacturer of the parachute; or
- (f) Exercise the privileges of his certificate and type rating unless he understands the current manufacturer's instructions for the operation involved.

ANYONE who circumvents Parachutes Australia instructions is in violation of FAR Part 65.127 and is, therefore, performing an illegal procedure.

### "Am I Qualified to Use this Equipment?"

As the new owner of a Parachutes Australia 7£££595 2 parachute system, before you use it, it is very important that you can answer yes to several questions. Only by doing so can you be assured that you have the necessary training and/or experience to safely utilise modern parachute equipment of this type.

**Question 1:** Does my experience level and/or training qualify me for using this equipment?

Advanced equipment such as the 7ELES95 2 have features requiring a certain level of experience and training in order to be used safely.

**Question 2:** Have I been briefed or trained in the operation of this equipment by qualified personnel such as an Instructor or Licensed Rigger?

If you have progressed to the level where you are qualified to jump advanced equipment, or if you have been trained on other types, there may be certain features of this system that you are unfamiliar with. Make sure that you have received a thorough briefing from a certified Instructor or Rigger for the type of equipment you are about to jump.

**Question 3:** Does the equipment fit properly?

Can you see and/or reach the main deployment handle, 3-ring release handle, reserve ripcord and RSL? This equipment, is built in a variety of container sizes, lengths, and widths, and an adjustable harness. These configurations along with options such as pull-out and BOC main deployment, make compatible sizing to the individual extremely important to the safe operation of the system. If the system does not fit properly, the handles may be inaccessible or may move during the jump thereby causing problems in the air.

The above questions have dealt with your ability to safely jump this *PARACHUTES AUSTRALIA* product only. If you have answered "Yes" to all the questions, you should feel comfortable using our equipment. However, there are additional factors that may influence your decision and ability that do not relate to our product. If you have any questions or feel uneasy about using this harness and container system, do not hesitate to ask a qualified Parachute Instructor, APF Certified Parachute Rigger, or contact Parachutes Australia at (02) 97572355 for any further information or training you feel necessary.

### PARACHUTES AUSTRALIA

### **Customer Service Policy and Limits**

### **Harness and Containers**

PA will provide no charge repair service for repairs that PARACHUTES AUSTRALIA has determined to result from defects in material or workmanship for a period of **six months from the date of purchase**. Date of purchase and proof of purchase must be supplied to PA by the customer with the item in order to be repaired free of charge.

### <u>Safety</u>

PA will perform all Mandatory Service Bulletins repairs or modifications due to SAFETY concerns free of charge.

### **Unauthorised Modifications/Alterations**

PA will charge for repair service when the damage is caused by unauthorised modification or alteration of the product. PA reserves the right to refuse to repair any product so modified or altered.

### Improper Use

PA will charge for repairs that results from improper use, or from abuse such as exposure to chemicals, saltwater, improper washing, improper packing, excessive exposure to sunlight, or negligence of the part of the user (i.e. jumping already damaged equipment).

### Limits

PA reserves the right to refuse service on equipment for which materials and/or manufacturing patterns and specifications no longer exist.

### Configuration

Articles sent in for repair should be sent in with all parts. PA may request and require additional information pertaining to the product.

### Accessory Part - Replacement

PA will recommend replacement of component parts based on inspection when safety is a factor due to normal wear and tear or maintenance of the product.

### Product Improvement

Product improvements will be available as an option to customers.

January 1998

Table I. Parts List -

QUANTITY	DESCRIPTION	Part Number
1	HARNESS/CONTAINER ASSEMBLY	6113-(2)
1	STEALTH RESERVE PILOT CHUTE	B021-(S)
1	SQUARE RESERVE FREEBAG AND BRIDLE	B001-( )
1	RESERVE RIPCORD (SOS)	H094-T
2	RESERVE STEERING TOGGLES	B002-(TR)
2	MAIN RISERS TY-8	B016
2	MAIN TOGGLES	B002-(TM)
1	MAIN DEPLOYMENT BAG	B011-( )
1	MAIN RIPCORD FXC CHEST MOUNTED	H091
1	MAIN RIPCORD - FXC HIP MOUNTED	H003
1	MAIN PILOT CHUTE 357L	B357
1	MAIN BRIDLE	B020
1	OWNER'S MANUAL	A1313-(2)

### NO SUBSTITUTION OF COMPONENT PARTS IS AUTHORISED!

# Section 2.0

# Component Compatibility

### Canopy Compatibility

**IMPORTANT** It is imperative that that the rigger and the owner understand what canopies are compatible with a particular model of Parachutes Australia harness/container assembly. *IF INCOMPATIBLE CANOPIES ARE USED WITH THIS TELESTS 2 SYSTEM, IT COULD FAIL TO OPERATE AS DESIGNED RESULTING IN SERIOUS INJURY OR EVEN DEATH TO THE USER.* 

### **Reserve Compatibility**

To determine whether a particular reserve canopy is compatible with a 7ELES9S 2 harness/container assembly, there are several requirements that must be met. They are pack volume, deployment type, TSO certification, and placard limitations.

### Volume

The pack volume of a canopy is determined by using the standard Parachute Industry Association (PIA) volume measurement as determined by PIA Technical Standard TS-104 in its most current edition. By cross referencing this measurement to the Parachutes Australia Main/Reserve Container Volume, Table II, the volume compatibility may be determined.

### IMPORTANT NOTES ON VOLUME REFERENCES

Parachutes Australia maintains the PIA canopy volume measurement study. If PA has not tested a particular make and model canopy in our volume chamber we cannot be responsible for its fit in a given size container. We will accept orders for specific size rigs if no reference to canopy make or model is made. However, if canopy sizes are stated on an order form then PA will determine what is the best container size for those canopies.

Proper container sizing is one of the more difficult processes in determining the correct size of main to reserve canopy compatibility. Volume testing by the Parachute Industry Association has shown a volume variable of up to 20% for a given canopy model.

The PIA canopy volume may be based on a single sample and should serve only as a rough guide in selecting the correct size of container to canopy. Factors such as temperature, humidity, age, number of jumps and packing technique affect the volume of a given canopy.

Reserve canopy technology has not progressed at the same pace as main canopies. Often, the reserve canopy volume determines the container size. Today's high performance main canopies allow jumpers to fly much smaller volume canopies than an appropriate size reserve canopy for the individual's weight and experience.

PA generally takes a conservative approach when selecting the appropriate container size for a given canopy combination. PA sizes containers a little on the loose side to ease packing, while making the 7ELES9S 2 more comfortable and durable.

The customer should tell the dealer the type of packing and fit that suits their experience and requirements. i.e. firm, ideal or soft pack. Write the customers' preference on the order to assist PA in meeting the customer's expectations.

PA will not assume responsibility for fit if a customer or dealer specifies a particular container size that may be marginal for the canopy combination.

### Reserve Deployment Bag and Bridle

Only a Parachutes Australia deployment bag and bridle assembly of the correct size and properly labelled with P/N B001 (TS?) is compatible with the *Televis 2*. No other deployment bag is approved for use with the *TELESIS 2* system.

Table II. 782898 2 Main/Reserve Container Volumes

All numbers refer to the cubic inch volume of the containers.

Container size	Volume
TS1 Reserve/Main	400/500
TS2 Reserve/Main	500/600
TS3 Reserve/Main	550/700
TS4 Reserve/Main	600/750
TS5 Reserve/main	650/850

### **Deployment Type**

There are 5 different canopy deployment methods in common use. Of these, only TYPE 5 (free bag) is approved for use in the Parachutes Australia 7ELES9S 2 harness/container assembly. The description and example is as follows:

Type 5: Free Bag: Canopy stowed in bag and lines stowed on/in bag.

Examples: Ram air reserve canopies.

# Section 3.0 User Information

# Main Container Packing Instructions

### **Assembly**

**Step 1** Lay out main parachute, flake canopy, and check lines for straightness and continuity.

**Step 2** With line check complete, attach connector links to main risers (nose of canopy on front riser, tail on rear riser). Note that risers are marked on back with an L or R to designate left and right. Double check that you have the proper riser on the appropriate side of canopy.

**Step 3** Route steering lines through guide rings on rear risers.

**Step 4** Route steering line through toggle grommet from Velcro side and align mark on line with the grommet. Pass line around either side of toggle and through grommet two more times in same direction. (*Figure* 1) Secure with a Figure 8 knot locked with an overhand knot or have your rigger finger trap the running end back into the steering line. Double check that toggle is secure and knot will not slip.

It is also acceptable to make a finger-trapped loop 1 inch long (*Figure 3*) and install as shown. (*Figure 4*) The finger-trap must be locked with a zigzag or bartack stitch.

**Step 5** Attach risers to harness making sure you have left on left and right on right.

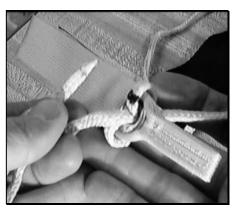


Figure 1



Figure 2

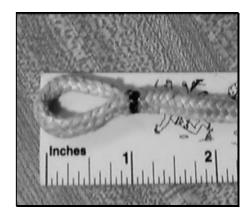


Figure 3

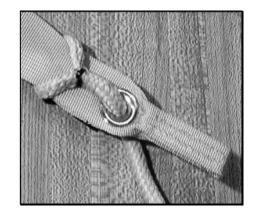
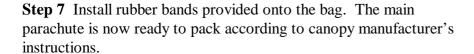


Figure 4

- **Step 6** Attach main deployment bag to canopy as follows:
- **a**. Install the bridle to the top of the main canopy by looping the small end through the ring or loop on the top of the canopy. (*Figure 5*)
- **b.** Take the large end and place it through the grommet in the top of the main bag. (*Figure 6*))
- **c.** Loop the main pilot chute onto the other end of the bridle by passing it through the pilot chute base loop and slide the large bridle loop over the top of the pilot chute to form a knot at the base.



**Step 8** Set brakes by pulling steering lines down until locking loops are just below guide rings on main risers. Insert main toggle upper end into brake set loop on steering line. Align and press toggle onto riser Velcro. Stow excess lower control line in Velcro keeper. (*Figure 7*)

### **Packing**

When packing the main canopy, dress it approximately 4" wider than bag (2" each side) to fill out sides and not concentrate bulk in the centre. For best appearance, bulk must be distributed evenly in the bag. Route lines out the center and lock the two center locking stows. Lock two outer locking stows and finish stowing lines to within 18" of connector links.

Work air out of the bag at this time to flatten the bag prior to placing it in container. Pick up bag and place it at bottom of the main container. Route main risers over shoulders and deep into riser cover channels on either side. Main toggles face inboard.

Place bag into main container with <u>lines to the bottom</u> of container. (*Figure 8*) **FAILURE TO PLACE LINES TO THE BOTTOM OF CONTAINER COULD RESULT IN A PILOTCHUTE IN TOW.** Kneeling on bag, push it into corners of container while pulling up on the side flaps.



Figure 5



Figure 6



Figure 7



Figure 8

### Main Container Closing -

**Step 1** "S" fold the main bridle and place on top of the main bag and place the base of the spring pilotchute on top of the bridle.

**Step 2** Collapse the pilotchute while placing the material in between the coils. (*Figure 9*) The arrow on pilot chute cap should point toward top of rig. Arrow indicates metal swage on pilotchute spring. Correct orientation prevents unsightly wear on container flaps.

**Step 3** Close the container in the numbered sequence. #1 - Bottom; #2 - Top; #3 - Left side; #4 - Right side. Pass the Ripcord pin through the AAD eyelet (If installed) and then through the loop to close. Close the pin cover flap upwards and tuck into the pocket a shown in *figure 10*.



Figure 9

### -Throw-Out (T.O.P.)

**Step 4** Route main bridle across top of bag and out upper right corner of container as in *Figure 8* on the preceding page.

**Step 5** Close main flaps in the order stamped on each flap. #1 - Top; #2 - Bottom; #3 - Left; #4 - Right. Pull flaps into place and lock with the curved pin. Mate velcro slack-tab and lay flat toward top. (*Figure 11*)



Figure 10

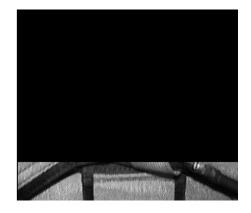


Figure 11

### FOLDING THROW-OUT PILOTCHUTE (T.O.P.)

**Step 1** Place pilotchute on a flat surface with the handle down and spread to its full size. (*Figure 12*)

**Step 2** Fold pilotchute in half and stow excess bridle near the outer edge of pilotchute. (*Figure 13*)

**Step 3** Fold outside edge toward handle keeping bridle inside. (*Figure 14*)

Step 4 Fold pilotchute into thirds as shown. (Figure 15

**Step 5** Fold pilotchute into thirds again so the result is a flat package about the same length and width as spandex pocket. (*Figure 16*)

**Step 6** Slide pilotchute into spandex pocket so that only handle protrudes. (*Figure 17*) Stow excess bridle under right side main flap.

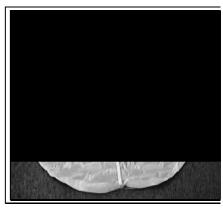


Figure 12

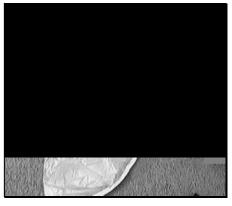


Figure 13



Figure 14

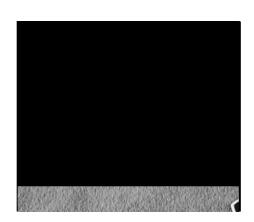


Figure 15

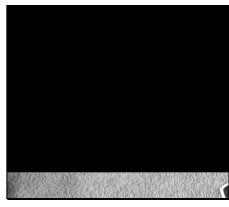


Figure 16



Figure 17

#### MAIN STATIC LINE INSTALLATION

The 7elevis 2 main static line activates a direct bag system. With ram-air canopies, the canopy is *free stowed* in the bag. That is, there is no assist device or connection between the canopy and the bag. Regulations requiring canopy assists are intended for round parachutes.



**Step 1** Disconnect the freefall pilotchute and bridle from the canopy attachment loop.

**Step 2** Loop the end of the Main Static Line over the yoke on the top of the main bag and tighten securely. (*Figure 18*)

**Step 3** Place the main bag in the main container with the static line exiting the upper left hand corner of the container. (*Figure 19*)

**Step 4** Close the container in the numbered sequence. #1 - Bottom; #2 - Top; #3 - Left side; #4 -Right side. Insert the static line Flexpin through the main closing loop.

**Step 5** Fold the static line above the Flexpin attachment point and double stow it in a rubber band on the static line stow loop on the left main flap. This is so that the Flexpin cannot be accidentally dislodged by the drag of the static line during use. (*Figure 20*)

**Step 6** Close the main protector flap and finish stowing the static line left to right in rubber bands located in stow loops provided. Place the static line snap in the pocket provided in the middle of the protector flap. (*Figure 21*)



Figure 18



Figure 19

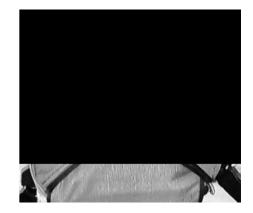


Figure 20



Figure 21

### SINGLE OPERATION SYSTEM HANDLE (S.O.S.)

The 7electe 2 S.O.S. (Single Operating System) utilises one handle and one operation for both the breakaway and reserve ripcord pin pull. A yellow loop style handle is placed below the three ring on the wearers left hand side. Peeling outward and then pulling downward will cause a staged, breakaway then reserve pin extraction. The RSL operates normally with this system as it does the normal two handle system.

The risers for the S.O.S. system are unique. The excess cable keeper is located closer to the grommet which the 3-Ring<sup>TM</sup> loop passes through. Be sure the use the correct risers.

#### **SOS Handle Installation:**

**Step 1** Insert ripcord cable into housing. Pull excess cable down between flaps. Turn the yellow handle Velcro side up and place stainless steel grommet on left hand loop of the ripcord cable. (*Figure 22*)

**Step 2** Rotate the handle counterclockwise (left) allowing the unstiffened fabric to turn the corner and fold down behind the handle and left hand flap. Mate Velcro between the handle and the left-hand flap. (*Figure 23*)

**Step 3** Route the breakaway cables in their appropriate housings and mate the right side handle Velcro to the flap. (*Figure 24*)



Figure 22



Figure 23



Figure 24

## 3-RING™ RELEASE ASSEMBLY

# Assembling the 3-RING™ Release with Type-8 Standard-ring Risers

**Step 1** With riser rings and loop facing away from harness, pass larger riser ring through harness ring from the rear and fold riser ring upward. (*Figure 25*)

**Step 2** Pass small riser ring through middle ring and fold small ring upward. (*Figure 26*)

**Step 3** Pass loop from top to bottom around small ring and through riser grommet. Double check that loop goes only around the small ring and not second ring also. Do not twist the loop. (*Figure 27*)

**Step 4** Place grommet on end of Fabric release cable housing over loop and hold it in place while pushing yellow cable through loop. Stow loose end of yellow cable in channel on back side of riser. (*Figure 28*)

**Step 5** Repeat Steps 1 through 4 with other riser.

**Step 6** Loop the RSL to left main riser. Avoid entangling RSL with anything else. *See RSL instructions next section*.

Double check risers for correct assembly. Inspect from side. (*Figure 29*) Only 1 item through each ring, all rings lay parallel and white loop routed through only 1 ring.



Figure 25



Figure 26



Figure 27

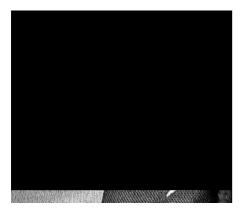


Figure 29



Figure 28

## Reserve Static Line Lanyard (RSL) System

### Concept:

The Reserve Static-line Lanyard or RSL system is a lanyard attached from the left main riser to a ring around the reserve ripcord cable. Upon jettisoning a malfunctioned main canopy the lanyard automatically pulls the cable which pulls the pin on the reserve ripcord. This results in activation of the reserve with a minimum loss of altitude.

Through the use of the RSL system, a greater degree of safety is realised. It must be stressed however, that the RSL is simply a backup to manual activation of the reserve ripcord In the event of a malfunction, the jumper must pull the reserve ripcord manually even though the RSL may activate the reserve faster. There have been fatal cases where the RSL has been disconnected but the jumper waited for the RSL activation.

### Installation - 7818595 2

The 7ELES9S 2 RSL System must be installed when the reserve is packed since the reserve ripcord MUST pass through the ring as the ripcord is installed.

**Step 1** Install the lanyard onto the left hand main riser as shown in *Figure 30* 

**Step 2** Assemble the left hand main riser to the harness ring as detailed in the pervious page and mate the ring end of lanyard to Velcro located ontop of the reserve ripcord housing channel Route ripcord through metal housing and through ring on RSL lanyard.

Route ripcord pin through opening in underside of reserve top flap (*Figure 31*) and out between inner and outer layers. (#4 flap)

**Step 3** Check that the lanyard hasn't passed around or through any housings or other attachments. It is important that lanyard is routed directly from pin to left riser without obstruction. (*Figure 32*)

#### INCORRECT RSL ROUTING WILL RESULT IN

## Harness Adjustments and Fitting

The 7elevis 2, as a training system, is designed with 5 points of adjustment. They are the chest strap, both leg straps, and the two main lift webs. The main lift webs normally have 3 positions of adjustments but may have more or less. The main lift web is designed with a positioning method called the Adjust-A-Tongue system. (Figure 1) This system allows easy adjustment of the main lift web with fixed locaters that ensure harness symmetry and secure the harness ends. This concept is unique to the 7elevis 2.

Your *Tolesia 2* may have leg pad extensions to vary the length of the lower leg pad. This allows the leg pad to be tightened properly on those people with small thighs. Large individuals can use the same rig, extend the pad for better comfort.

When adjusting the 7clesia 2 main lift web for the individual who will use it, the adjustments are done BEFORE putting the rig on the jumper. Open the harness covers (Figure 33) and adjust the length of the main lift web using the preset adjustments. The main lift web adjustments on the 7clesia 2 normally come in three positions - SMALL, MEDIUM, and LARGE. The first two positions are marked on the Adjust-A-Tongue pocket with a large S or M. The Large position for the main lift web is with the adjustment out as far as possible with the stop against the main lift web adjuster. (Figure 34) In this position the free end of the main lift web is stowed in the elastic keeper. Once the 7clesia 2 is adjusted to fit the jumper, put it on them, fasten the chest strap, and tighten the leg straps to take the slack out, BUT NOT TIGHT. Slide the floating pad or leg pad extension into position and finish tightening the leg strap. Now check the fit of the 7clesia 2 to ensure that the jumper can reach all the operating handles and that the rig is not too slack and will not move around excessively.

### Note:

If you have any questions about these instructions, you should seek the help of a certified Rigger or contact *Parachutes Australia* (02) 97572355

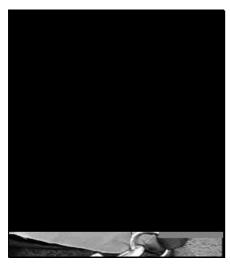


Figure 33



### Maintenance Procedures

The 7ELES95 2 begins its life as one of the finest pieces of parachute equipment you can buy. It is up to the owner to maintain it in top condition. Below are certain areas that you and/or your rigger should check on a regular basis to ensure proper operation and long life of your equipment.

### Before Each Jump You Should Check:

- 1. All ripcord and 3-Ring<sup>™</sup> housings for tackings, damage or obstructions.
- 2. Reserve ripcord pins, cables, handles and pockets for proper seating, wear and/or damage.
- 3. Main deployment activation devices (BOC, TOP, and Pull-out) for wear and placement. Also check routing of bridles for twists, etc.
- 4. Main risers routed smoothly over the shoulder and riser covers closed properly.
- 5. 3-Ring<sup>TM</sup> release mechanism assembled properly and excess cable towed properly.
- 6. All harness webbing and hardware for wear or damage.
- 7. All flaps closed in proper sequence and tucked in.

### Note:

IF ANY WEAR OR UNUSUAL CONDITION IS FOUND, CONSULT PARACHUTES AUSTRALIA OR A QUALIFIED PARACHUTE RIGGER IMMEDIATELY!

### After Putting Your Rig On, Check:

- 1. Reserve ripcord handle secure in its pocket.
- 2. Chest strap is properly threaded and free end secured.
- **3.** Leg straps are properly threaded and free ends are stowed. Floating leg pads positioned for best comfort.

### 3-Ring™ Release Maintenance

The following procedure should be done weekly or every 25 jumps, whichever comes first. If rig is subjected to unusual abuse, such as exposure to excessive dust or sand, or if it is dragged, it should be inspected immediately.

**Step 1** OPERATE RELEASE SYSTEM ON THE GROUND. Pull release cable completely out and disconnect risers.

- **Step 2** While system is disassembled, closely inspect it for wear.
  - a. Check nylon loops on risers to be sure they are not frayed.
  - b. Check Velcro on release handle and harness to insure that it will adequately hold handle.
  - c. Check stitching that holds harness hardware to main lift web and hand tackings that hold cable housings in place.
  - d. Check metal housing ends for sharp edges or deformation.
- **Step 3** VIGOROUSLY TWIST AND FLEX riser webbing on each side where it passes through the big ring to remove any *set* or deformation in webbing. Failure to do this might result in a hesitation when the release is activated with a low-drag malfunction such as a streamer or bag-lock.
- **Step 4** Check inside of fabric release housing for gravel or other obstructions. Use the cable to dislodge gravel. Inspect housing/channels for dents or cuts or other damage.
- **Step 5** Clean and lubricate release cable with a silicone spray. Spray on a paper towel and firmly wipe the cable a few times. A THIN invisible film should remain too much will attract grit or dirt. Failure to clean release cables could result in higher than normal pull force during breakaway.
- **Step 6** Reassemble system properly, in accordance with instructions given in this manual. Double check it. Do a continuity check to make sure canopy is straight and risers are not reversed.

Regular, careful and thorough compliance with this maintenance procedure will prolong the life of the 3-Ring<sup>TM</sup> release system, and help to insure its operation during breakaways.

#### Note:

IF ANY WEAR OR UNUSUAL CONDITION IS FOUND, CONSULT PARACHUTES AUSTRALIA. OR A QUALIFIED PARACHUTE RIGGER IMMEDIATELY!

### **FXC 12000 Main Installation Procedure**

- **Step 1** Install the FXC into the pocket on the right hand side of the main container. Make sure that the activation cable is routed out towards the side flap and the sensor unit out towards the harness. ( *Figure 35*)
- **Step 2** Feed the sensor unit under the main ripcord housing.
- **Step 3** Route the sensor housing through the channel on the bottom of the backpad . ( *Figure 36*)
- **Step 4** Mount the sensor unit on the left side leg strap cover on one of the three locations as preferred. (*Figure 37*)
- **Step 5** Attach the activation housing end to the ripcord housing end using the FXC housing clamp provided. Be sure to secure the clamp through the webbing loop located approx. 70mm from the side flap closing grommet. (*Figure 38*)
- **Step 6** Install the FXC main ripcord into the housing and pass the ripcord pin through the eye of the FXC terminal before inserting the pin through the main closing loop.
- **Step 7** It is recommended that three live firings of the FXC be performed to ensure the security of the two housings and the attachment point.
- **Note:-** Ground firing the FXC can be accomplished by placing a plastic bag over the sensor and quickly blowing into the bag.

### 120 Day Maintenance

Your Rigger should thoroughly inspect your 7ELESIS 2 at every repack cycle to insure that all components are in airworthy condition. *These areas should include:* 

- 1. Reserve pilotchute, bridle deployment bag, housing, and ripcord.
- 2. Reserve canopy fabric and lines.
- 3. Reserve connector links tight.
- 4. Ripcord pocket secure.
- 5. Main bridle and pilot chute.
- 6. Harness and container in good airworthy condition.
- 7. Flex-Ring buffers. Inspect inside of buffers for excessive wear. (Figure 39)

Buffers are designed to absorb wear before the harness webbing. The inside should look shiny and smooth and may be discoloured from hardware finish. If buffers are cut or frayed, it may be caused by damaged hardware or foreign matter (dirt) imbedded in the material. If wear is excessive, rig should be grounded and returned to Parachutes Australia for repair.

### Major Alterations / Repair

**Parachutes Australia** does NOT authorise major alterations or repairs to the **7elesis 2** harness and container systems. Any major alterations or repairs must be made by the manufacturer or a designated PA Service Center. Contact **Parachutes Australia**, at (02) 97572355, for the name of an PA Service Center in your area.



Figure 39

### Rig Cleaning - CORDURA®

Table III - CORDURA® Recommended Stain Removal Methods \*

STAIN	REMOVAL METHOD	
Coffee, Fruit Juice, Milk, Soft Drinks, Tea, Tobacco Sauce, Wine, Urine	Detergent 1 /blot/water/blot	
Catsup, Chocolate, Blood	Detergent/blot/ammonia <sup>2</sup> /blot/water/blot	
Mustard	Detergent/blot/vinegar <sup>3</sup> /blot/water/blot	
Spicy mustard (turmeric), Kool- Aid®	Solvent <sup>4</sup> /blot/detergent/blot/vinegar/blot/water/blot	
Cooking oil, Crayon, Lipstick, Mayonnaise, Motor oil, Show polish	Solvent <sup>4</sup> /blot/detergent/blot/water/blot	
Chewing gum	Freeze with ice cube/ scrape/solvent/blot/ detergent/blot/ water/blot	
Furniture polish, Ink (Permanent)	Paint remover <sup>5</sup> /blot/solvent/blot/detergent/blot/ ammonia/blot/vinegar/blot/water/blot	
Furniture polish, Shoe polish	Seek the help of a professional upholstery cleaner	
used in an inconspicuous place to test for color-fastness. Optimum cle	lean, white cloth dampened with the recommended cleaning agent should be saning will be achieved by not over-wetting the cloth and by turning it frequently to the spot toward the center. This process should be repeated until the spot is	
DetergentOne teaspoon neutral powder detergent (e.g. Tide or All) in 1 pint warm water.		
<sup>2</sup> AmmoniaA 3% solution.		
VinegarWhite vinegar or a 10% acetic acid solution		
SolventDry cleaning fluid - preferably 1.1.1 trichlorethane		
Paint removerPaint remover with no oil in it.		
NOTE: Oily and greasy stains In addition to the recommended methe "HOST" (Racine Industries), "CAPTURE" (Milliken) and "K2R" (Texize).	od, some stains (e.g. perspiration/body oils) respond well to dry cleaners such as Carefully follow directions on the label.	

<sup>\*</sup> Recommendations based on fabrics finished with Du Pont Teflon® WBC Soil and Stain Repellent for CORDURA®. The methods were effective on stains that were allowed to sit untreated overnight. Removal is usually easier when stains are cleaned immediately.

Washing Your Rigs It is acceptable to wash your 7ELESIS 2 containers system carefully. Disconnect reserve canopy and remove all components such as ripcord, hook knife, packing data card, etc. Soak in warm soapy water overnight. Use a mild detergent such as Woolite intended for delicate fabrics. Use a soft plastic bristle brush to remove stubborn stains like those common on leg pads. Rinse thoroughly and hang to dry. Wipe metal components dry quickly to prevent rust.