## **TECHNICAL & SAFETY COMMITTEE**



## **INTERNATIONAL PARACHUTING COMMISSION (FAI)**

Technical & Safety Information Notice No.	5/2013 VELOCITY SPORTS EQUIPMENT SERVICE BULLETIN SERVICE BULLETIN VSESB001, REV 0, RE MAIN RISER LOCKING LOOP WEAR. W.N. 47
Date of Issue	12 July 2013
Subject Matter and Applicability	VELOCITY SPORTS EQUIPMENT SERVICE BULLETIN VSESB001, REV 0, RE MAIN RISER LOCKING LOOP WEAR.
	<b>DATE:</b> June 01, 2013
	SERVICE BULLETIN VSESB001, REV 0.
	SUBJECT: MAIN RISER, LOCKING LOOP WEAR
	STATUS: MANDATORY INSPECTION
	IDENTIFICATION: All main risers manufactured by Velocity Sports Equipment(VSE)
	BACKGROUND: Several main risers have been found in the field with frayed/partially cut locking loops (the white type 2A loop). The amount and location of damage on the loops varies, leading VSE to conclude there may be several contributing factors.  A loop failure can result in an out of sequence main release and reserve deployment which can cause an entanglement. Due to this danger, VSE feels all main risers should be inspected according to the following Service Bulletin.
	Who can inspect: Any FAA certified senior or master parachute rigger or foreign equivalent.
	INSPECTION PROCEDURE:  1. Remove the cutaway handle / yellow cutaway cables from the rig and disconnect the risers.  2. Closely check the locking loops for damage.  a. See "WHAT TO LOOK FOR: NORMAL WEAR OR DAMAGE" to determining if the locking loop shows normal wear or signs of damage. If in doubt, please contact VSE.  b. If damage is found, the rig must be repaired before it can be jumped. See "RESOLUTION"  c. If normal wear is found, the rig can be jumped, but VSE suggests periodic checks moving forward. See "RESOLUTION" for more details  3. Reassemble the system, being careful not to reverse the risers or introduce a twist.

## WHAT TO LOOK FOR: NORMAL WEAR OR DAMAGE?

Please review the following pictures to see the difference between loops with normal wear and damaged loops.

The following picture shows a new riser locking loop.



**NEW LOCKING LOOP** 

The following pictures show locking loops with normal wear.



**NORMAL WEAR, FRONT** 



**NORMAL WEAR, BACK** 

The following pictures show locking loops with damage; heavily frayed and partially cut.



DAMAGED, FRAYED



DAMAGED, FRAYED

DAMAGED, PARTIALLY CUT

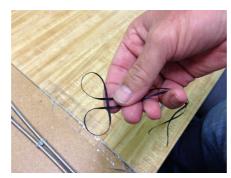




DAMAGED, PARTIALLY CUT

	RESOLUTION:  If the loop shows signs of damage, the rig should not be jumped and VSE should be contacted for further instructions. VSE may also ask for additional information to help determine the root cause and most effective repair. At minimum, VSE will need 2-4 photos, one of each riser loop and one of each housing grommet. Please have these available to send to VSE when you call in. In most cases, once the root cause is determined, VSE will provide a parts kit which can be installed by an FAA certified senior or master parachute rigger or foreign equivalent using the Housing Replacement Procedure provided at the end of this service bulletin. In certain cases, VSE will require the rig be returned to VSE for further inspection and repair.  If the loop shows normal wear, the rig can continue to be jumped and no immediate repair is needed.  VSE recommends periodic checks of the locking loops moving forward for all rigs. Minimally, these checks should be completed every three (3) months during the periodic maintenance of the 3 ring release system.
Compliance	Before next jump
Concerned Publication	VELOCITY SPORTS EQUIPMENT SERVICE BULLETIN VSESB001, REV 0, dated 20 May 2013.
Authority	Kelly Farrington Velocity Sports Equipment, PO Box 3370, Sunriver, OR 97707 Telephone: 253-445-8790; Fax: 253-445-8792
	Housing Replacement Procedure: The following steps can be taken to replace the short and long cutaway housings on an Infinity Rig. This procedure can be used with slight modification whether a rig has a regular chest strap or an articulated chest strap. The housings can be replaced without the need to disturb a packed reserve. The steps below are organized assuming the new housings are in hand prior to starting, but can easily be used to remove the original housings prior to receiving the new housings.
	Remove the cutaway handle/cables

- 2. In the case of chest articulation, the housings will need to be removed from the double housing clamp which is attached to the handle pocket.
- a. To remove, twist the housings approximately 60 degrees in both directions. Take care not to bend the housing permanently. This will loosen the clamp to allow the housings to be removed from the clamp connected to the handle pocket.
  - b. Be sure to tighten this clamp once the new housings are installed.
- 3. Attach the tack cord to both sets of housings
- a. Tie tack cord on new housings using the double loops shown (end with both housings shrink wrapped)
- b. Tie tack cord end of old housing (end with amp connector/grommet)
- c. Ensure the tack cord is secure so it doesn't come undone inside the yoke









- 4. Pull the old housings out as you feed the new housings in.
- a. Partially expose the MLW and 3/4" tape loop; both located within the left mudflap
  - b. Pull housing through from below the right side mudflap
  - c. Take care as you feed the tied ends through the binding tape loop
  - d. Take care as you feed the tied ends into the yoke
- e. Once new housings are completely pulled through, position the new housings so short housing grommet is flat and facing back of rig
  - f. Remove tack cord
  - g. Feed housings through gap in chest strap



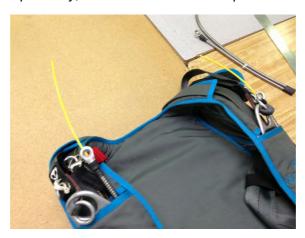








- 5. Install cutaway handle
- a. Check cable lengths. The cable protruding from the RSL side housing must be 1" longer than the non RSL side.
- b. Cable should be 6" on non-RSL side; 7" RSL side when measuring from the end of the housing. If cables protrude less than 4/5" respectively, the handle should be replaced.



6. Re-assemble the cables and main risers.



7. Procedure complete



PO Box 3370 • Sunriver, OR 97707 • Voice: (253)445.8790 • Fax: (253) 445.8792 • Email: VSE@VelocityRigs.com • wwwVelocityRigs.com

Thanks to Ms Kim Hardwick, Technical Officer, Australian Parachute Federation, for bringing this Service Bulletin to the attention of the IPC T&S Committee.

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The Technical & Safety Committee, International Parachuting Commission, can be contacted on e-mail - <a href="mailto:lmcnulty@skydiveireland.ie">lmcnulty@skydiveireland.ie</a>

Liam McNulty, Technical & Safety Committee, International Parachuting Commission. 12 July 2013