

PSB#110186
3-ring Release Periodic Maintenance & Mini 3-ring Deformation
November 1, 1986

SUBJECT 3-RING RELEASE PERIODIC MAINTENANCE

STATUS Recommended

IDENTIFICATION All pack and harness assemblies fitted with a 3 -Ring Release System.

BACKGROUND The Booth 3-Ring Release System has been in use for three years, with excellent results. Although the system is at least as durable as the - rest of the harness/container assembly, it requires periodic maintenance and inspection to insure proper operation.

Feedback from riggers and some of the thousands of users has made it possible to publish this set of maintenance and inspection instructions. It must be followed exactly.

Generally, it is NOT recommended that the risers be attached to the harness when new and "forgotten". Like all skydiving gear, the 3-Ring Release should be carefully inspected and cycled (operated) on a regular basis.

Specifically, the procedures below should be done at least every month. This is especially important if the rig has not been used for a month or more (such as during the winter). Immediate inspection is required if it has been subjected to some abuse such as a drag across the runway, a water landing, or exposure to lots of dust or sand.

- PERIODIC MAINTENANCE
1. Every month operate the 3-Ring Release System on the ground. Extract the release cable completely from the housings and disconnect the risers.
 2. While the system is disassembled, closely inspect it for wear.
 - Check the white locking loops (the ones that pass over the smallest ring and through the grommet) to be sure they aren't frayed.
 - Check the Velcro on the release handle and main lift web to insure that it adequately holds the handle.
 - Check the stitching, including that which holds the large ring to the main lift web and the hand tacking that prevents the release housings from sliding through its keeper. (This keeper is located a few inches above the padded release handle).
 3. Take each riser and vigorously twist and flex the webbing near where it passes through each ring.

The idea is to remove any set or deformation in the webbing. Failure to do this might make the release hesitate when activated in response to a low-drag malfunction such as a streamer.

4. Check the insider of the release housing for gravel or other obstructions. Use the cable to do this Inspect the housing for dents or other damage (this is very unlikely unless the rig was smashed in a car door or suffered similar abuse).

5. Clean and lubricate the release cable with a light oil such as "3in V. Put a few drops on a paper towel and firmly wipe the cable a few times. A THIN invisible film should remain - too much will attract grit and dirt.

Failure to do this could require a higher-thannormal force to extract the cable during a breakaway.

6. Inspect each release housing and assembly. There are two kinds: an older hand-tacked one (with a flexible grommet) and a newer swedged version.

It is recommended that the older type be replaced.

Kits are available from the Relative Workshop at \$5 a set.

7. Re-assemble the system properly, insuring that it is done in accordance with the Owner's Manual.

Double check it. Make sure the risers aren't reversed.

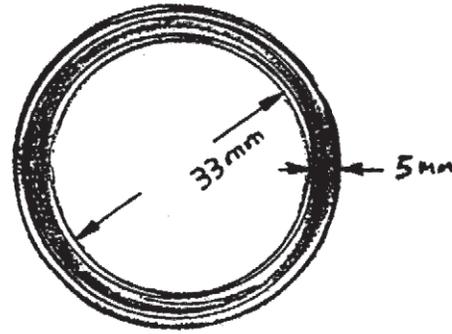
8. If any wear is found, consult the manufacturer or a rigger immediately.

AUTHORITY The Relative Workshop
DISTRIBUTION APF Packers and Riggers NZPF Parachute Technicians

SUBJECT MINI 3-RING DEFORMATION

STATUS MANDATORY

IDENTIFICATION The Relative Workshop
Part No. RW 2
Inside Diameter 33 mm
Wall Thickness 5 mm



BACKGROUND In late 1981, Para-Flight introduced a miniature version of the 3 -Ring Release, combined with the introduction of the Swift System. The Rings used on the Harness were the size of the middle ring in the existing system, but were specifically manufactured for increased strength.

Recently, reported incidents of deformation of the largest ring in mini 3-ring installation, have brought a dangerous situation to our attention. Some mini 3-ring installations have not utilised the strengthened mini ring.

The rings which deformed had a noticeable surface texture, consisting of numerous lines following the circumference of the ring, running parallel, 1-nun apart.

These concentric lines are not evident on approved 3-ring hardware.

INSPECTION Parachute owners who have mini 3-Ring installations, where these lines are evident on the largest ring (harness attachment), must not use the parachute assembly until the manufacturer has confirmed the source and reliability of the rings, or the rings are replaced with rings that are known to be of adequate strength.

AUTHORITY Canadian Sport Parachute Association Technical Bulletin.

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