



PSB#031798
Double-Ended Drogue Release Riser Closing Loop
March 17, 1998

Status: Original double-ended drogue release closing loop (TVDRDL) is being replaced by a new version, Part #TVDRDL-R1. Use of the "New Loop" is Mandatory.

Identification: All Relative Workshop (RWS) Vector Tandem Systems -Worldwide -which utilizes a double drogue release riser.

Background: Recent reports concerning drogue release hesitations have prompted Relative Workshop to investigate these extremely rare occurrences. This is what we have discovered.

1) There are several versions of the double drogue release riser in existence. The first version featured "0" Stainless Steel grommets which are set in-line. A second version was designed with the grommets staggered to help prevent cable-crossing malfunctions. A third model is now available which features staggered grommets and separate cable channels. All versions of our drogue riser work well with the new loop and remain approved for future use.

Crossing the yellow cables can cause hang-ups on both the first and second versions of our drogue release risers. NEVER cross the cables (either inside or outside the webbing channel) as this can cause the twisted cable to trap the end of the loop, thus preventing a clean release.

3) The primary cause of a drogue release hesitation (when correctly assembled) is the bartack on the original loop (#TVDRDL). By its very nature, a bartack will make the center section of the loop extra stiff, which can cause a hang-up by leveraging the loop between the small ring and the riser grommet.

4) During our testing, we discovered the best solution was to create a loop that remained flexible over its entire length. This was accomplished by using 3 passes of single needle straight stitching rather than a bartack. Most old loops were bartacked in white E-thread, while the new loops are sewn in black E-thread. The new loop worked well with all existing drogue risers and our test evaluations indicated 100% successful releases.

Reminder: The standard emergency procedure when a tandem instructor experiences a hesitation of the drogue release is to immediately pull the other drogue release handle.

Service Bulletin: Construction procedures are outlined here on Page 2, and supersede the original construction procedures shown on Page 19 of the Tandem Vector Owner's Manual, March 1993 edition.

Installation Procedure: Installation and use of the new loop remains the same. Refer to page 38 of the Tandem Vector Owner's Manual.

Qualified Personnel: A certificated rigger may manufacture the new loops. Installation may be done by the tandem instructor or rigger packing the system.

Compliance Date: Immediately

Authority: Relative Workshop, Deland, Florida, USA

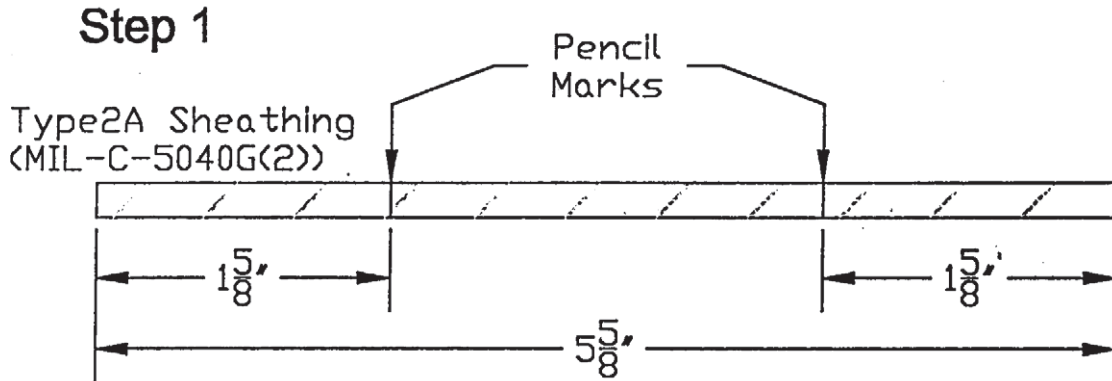
Distribution: Parachutist, PIA, Skydiving, USPA, all Tandem Vector System owners, worldwide.

Trade-In Policy: Relative Workshop will accept for trade-in, original (Part #TVDRDL- factory-made) RWS drogue release loops and will exchange them for the new version (Part #TVDRDL- RI). The retail cost of these loops remain at U.S. \$1.00 per loop.

Double-Ended Drogue Release Riser - Closing Loop Construction (Part #TVDR-LR1)

Step 1:

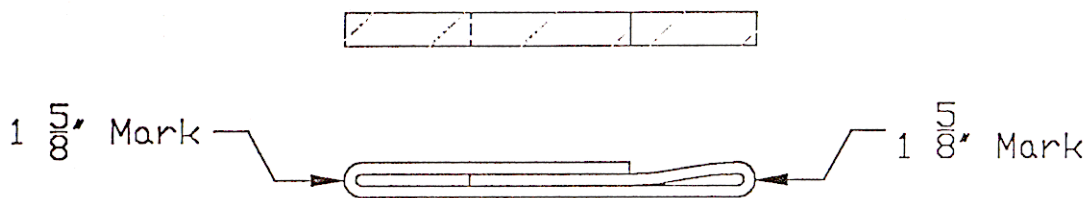
Cut a piece of non-surface treated, Type2A Sheathing (MIL-C-5040G(2)) at a length of 5-5/8' using either a hot knife or scissors. If scissors are used; be sure to lightly heat sear the ends to keep them from fraying, Mark the Type2A Sheathing at 1-5/8' from each end using a pencil.



Step 2:

Fold the Type2A Sheathing at both 1-5/8' marks with the marks to the outside of the fold; creating a 3-layer section of Type2A Sheathing as shown in the figure. It is critical to the finished length of the closing loop that the marks be located at the exact center of the fold.

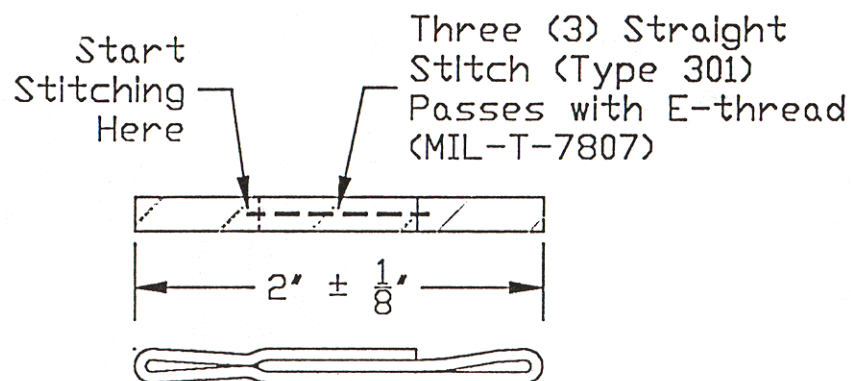
Step 2



Step 3:

Using E-thread (MIL-T-7807) and a straight stitch (Type 301) sewing machine set at 7-11 stitches per inch, place three (3) stitch passes over, the 3-layer section of the Type2A Sheathing to secure the folds made during Step 2. The beginning and ends of the stitch passes should step over both sear cut edges of the Type2A Sheathing.

Step 3



Warning!

This drawing depicts the Relative Workshop's standard manufacturing procedures for this particular component. Any deviation from the stated procedures may affect the ability of the component to function as desired. The Relative Workshop is not responsible for any damages resulting from incorrect manufacture of this component. Use or reproduction of this document in conjunction with any other harness/container system, without expressed written consent from Relative Workshop is strictly prohibited.