USCG 500N-V5 Helm Chair

Harness Actuator Cable Replacement Instructions

Tools Required

- 1. #2 Phillips Screw Driver
- 2. #3 Phillips Screw Driver
- 3. Wire Cutters
- 4. T9 torx driver

Removal



1. Remove the plastic covers and four screws that hold the back cushion. Remove the cushion and set aside.



2. Remove the two screws securing the locking lever to the underside of the arm rest.



3. Move the lever to the forward or "unlocked" position and unscrew collar to disconnect the cable from the lever.

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4. Remove the rubber grommet and cut the cable ties holding the cable to the seat.



5. Using the T-9 torx driver, remove the screw securing the cover to the harness reel assembly.

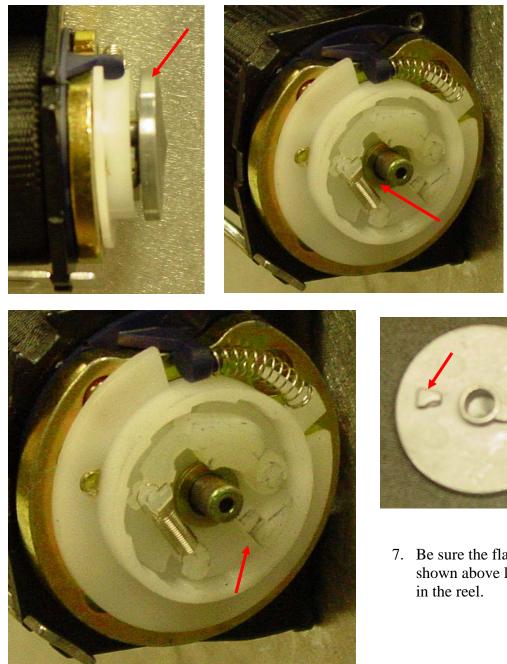


6. Remove the two screws securing the locking cable assembly to the harness reel. Carefully remove cable assembly. Be careful not to loose the inertial weight and washers inside the cable assembly.

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Inertial weight (left) Washers (right)

- 7. Be sure the flat tang on the weight shown above lines up with the flat tang in the reel.
- 8. Completely remove old cable assembly and reinstall new assembly in the reverse order. When mating the new assembly to the reel first rotate the housing slightly clockwise then rotate counter-clockwise until the locator tabs click into place. This will ensure that the actuator is properly mated with the reel mechanism.
- 9. Complete assembly and test the reel for proper operation.

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This Instruction Sheet is supplied with p/n 500-010-021.



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Instruction Sheet for Field Replacement of Inertial Reel

If you have determined that your Reel Harness on the seat is **not extending or retracting** properly due to a failure of the Inertial Reel Mechanism and not due to any problems with the cable, this procedure will guide you in removing the harness straps from the old reel mechanism and install it into a new mechanism. If your harness straps are ripped or frayed, replace the entire Reel Harness Assembly immediately. It is important that you read these instructions and understand them before you begin.

1. Remove the entire Reel Harness from the seat. Save all hardware for re-installation. First, remove the Manual Release Lever located on the right-side arm. Remove the back cushion. Separate the cable from the lever and pull it through the backpan. Re-attach the cable to the lever. Remove the Reel Harness from the backpan. Take the Reel Harness off the boat and into a well-lit work area.



This Reel Harness had completely failed. The cable was missing, the webbing (straps) would not spool out and the screws had rusted. The screws were sanded off and the red cover removed. The corrosion inside prevented the reel from extending but by working the axle shaft, you should be able to extend the strap. Once the strap is extended, the exchange can begin.

Axle Shaft



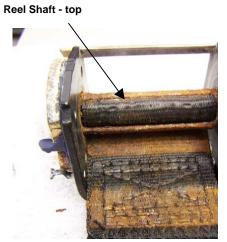


2. Place Reel Harness on work bench. The Harness' mounting holes should be down on the bench.

3. If not already removed, remove Cover from Reel Harness.

4. Spool (extend) the harness webbing from the reel. With a piece of tape, mark the top-side of the webbing.





5. Keeping the webbing spooled out if there is any spring left, can be difficult. Feed the webbing back through the Harness Mounting Bracket before continuing. Carefully push the webbing up from underneath the reel shaft. **Take care not to CUT the webbing**! Once the webbing starts to come out of the reel shaft, pull it out and away so you can access the retaining pin contained in the top of the webbing.

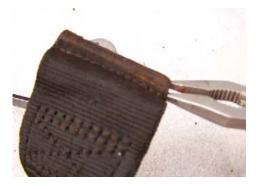








Retaining Pin -



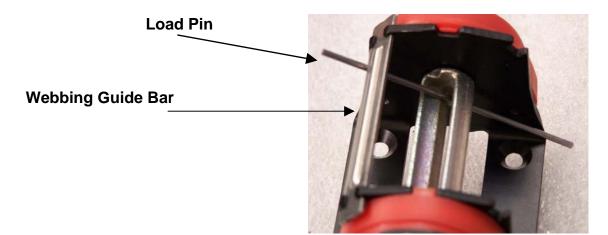


6. With needle-nose pliers, pull retaining pin from webbing.



7. Remove webbing from Reel Shaft.

IMPORTANT NOTE: The following steps MUST be followed closely or the inertia reel could retract without the webbing installed. If this happens, the reel must be returned for rewinding! The Load Pin must not be removed until the webbing has been installed.

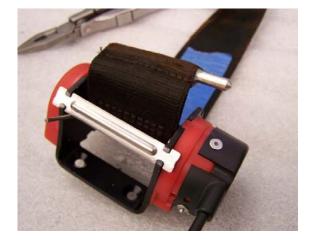




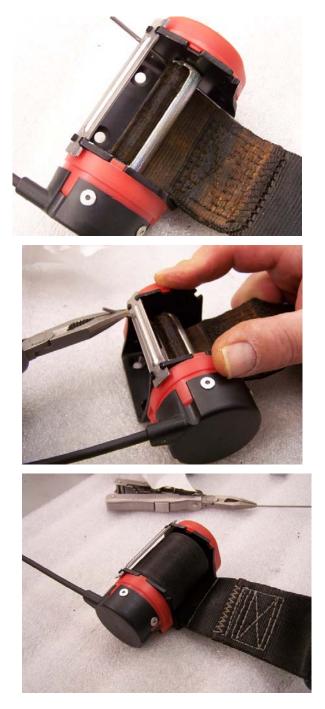
8. Work the webbing into the small slot on the Reel Shaft.



9. Work the webbing through the slot until the end extends enough to allow insertion of Retaining Pin.



10. Install new Retaining Pin (supplied) into end of webbing. Note: A little grease on the pin will help with installation. Pull webbing through the slot and allow the webbing end with retaining pin to settle in the large side of the slot.



11. Remove the Load Pin. Slowly allow the spool to retract the webbing. Guide the webbing as it spools up. Holding the Reel steady on the work surface, extend and retract the webbing fully several times. This will allow the webbing to seat properly and ensures the reel is working properly. With webbing fully extended, LOCK the mechanism and check to see that the reel functions properly when locked.

12. If you are satisfied that the Reel Harness is functioning properly, spray lubricant into holes provided and re-install onto seat. (See attached Instruction Sheets)

If you require any further assistance with these instructions, contact: Customer Service, 631.477.2400, ext. 135 or e-mail: CustomerService@stidd.com This Instruction Sheet is supplied with p/n 500-010-020.



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CRES Reel Harness Cover Replacement

If the Reel Harness cover is lost, damaged and/or needs to be replaced, order p/n 500-010-020, Reel Harness Replacement Cover Kit.

Kit contains: Reel Harness Cover #4 x 3/8" Stainless Steel, Philips Pan Head Self-Tapping Screw

1. With old cover removed, position new cover over Reel Harness. Be sure that the cover is flush against Spring Side Cover and Back Pan. Carefully determine the position of the fastening hole that holds the cover in place on the Cable side of the Reel Harness and mark on new cover.

2. Drill a 1/16" hole for the $#4 \times 3/8$ " SS self-tapping screw provided.

3. Attach Cover. Once cover is attached, test Reel Harness in locked and unlocked positions to assure that the screw does not interfere with mechanism.

TECHNICAL SUPPORT For technical support, please call, write or fax as follows: Contact Customer Service at: STIDD Systems, Inc. Mailing Address: P.O. Box 87 Shipping Address: 220 Carpenter St. Greenport, NY 11944 Tel: 631-477-2400, ext. 135, Fax: 631-477-1095, e-mail: CustomerService@stidd.com

BUCKLE REPAIR INSTRUCTIONS

This Instruction Sheet is supplied with p/n 500-010-019.

Tools recommended: Small Forceps (see photos)



Assembly as provided



- 1. Remove e-clip
- 2. Pull pin from assembly



- 3. Place Assembly in Buckle
- 4. Insert pin through Buckle and Assembly. Be sure to line up "tails" on springs with keyway in pin.





- 5. Close Buckle and grab pin with forceps.
- Slowly rotate pin COUNTER-CLOCKWISE until pin's end slips into place. In re-assembling the buckle, care should be taken not to over-wind the spring. Additional rotations will not allow the cover to completely open 180° without binding up.





7. Install e-clip.

For more information, contact: Jac Citera, STIDD Systems 631 477-2400, ext. 135 jcitera@stidd.com,

This Instruction Sheet refers to modifications made to parts included with p/n 500-010-015 & p/n 500-010-021.



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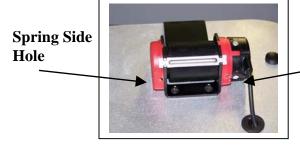
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Corrosion Protection in Reel Harness Mechanisms

The following procedure provides Maintenance Personnel with an easy method of displacing water and moisture on the mechanisms within the reel harness.

Step 1: Remove black plastic cover. Cover is attached with a single #8 torx-head screw.





Inertial Mechanism Side Hole

Step 3: Using WD-40 or similar product, spray the liquid into the spring and inertial mechanism holes under the end caps. Push Applicator tube up into the holes as far as possible. During the application, unlock the reel harness and "work" the harness strap repeatedly to insure the liquid is evendistributed. This will help to keep the reel harness functioning and protected from corrosion due to exposure from the elements. Application could be done at least on a weekly basis and/or upon return from operations to the station.

Following application(s), always re-install cover.



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