

Maintenance and Safety Directive

Reference: Pulley Bolt replacement

Introduction:

Spectrum Sports Intl is issuing this M&SD, which is to inform owners and operators of their responsibility to replace all pulley bolts on all mobile and stationary climbing walls for safety reasons.

This Directive is being sent to each jurisdiction so that the jurisdiction inspectors will know the requirements for the inspection of pulley bolts and require that they be replaced per this Directive. This is for all Spectrum Sports Int'l. Climbing walls, mobile and/or stationary models purchased from May 1997 to Current.

Pulley Bolts:

All grade 8 bolts that secure a pulley or pulleys need to be changed annually. The number of bolts will depend on how many Auto-Belay devices are attached to the wall. For each Auto-Belay device there will be two (2) davit pulley bolts located at the top of the wall and two (2) Auto-Belay pulley bolts. This will be the same number of bolts even though the Auto-Belay device has changed over the years. Auto-Belays manufactured August 1997 through February 2000 will have a pulley box which houses the pulleys. Auto-Belay devices manufactured from March 2000 to date will have one bolt located on the Auto-Belay cart and the other at the bottom of the Auto-Belay tank. The number of new bolts required will depend on the number of routes on your climbing wall. If you have a 4 person climbing wall you will need to replace 16 pulley bolts; if you have a 3 person climbing wall there will be a total of 12 pulley bolts to replace. *The bolts must be Grade 8 bolts!* The nylock nut should be replaced at the same time. Please call Spectrum Sports Int'l for specific instruction on replacing the pulley bolts.

The hardware associated with the Climbing walls – pulleys, quick links, swivels, carabineers, bolts, pulley cart bearings, etc –are also subject to fatigue and wear and thus become time life components. Failure to do the inspection and replacement may result in a failure, which in turn results in injury or the death of a customer. If we don't take care of safety, insurance will become so costly that there will not be climbing walls.

Action:

Regardless of ownership we have taken steps to inform state inspectors, insurers and/or new or old operator/owners of any of our climbing wall products of the following mandated actions:

- 1. NEW SPECTRUM POLICY: It is mandatory that each and every pulley bolt is replaced every 12 calendar months from date of purchase.
- 2. MAINTENANCE AND SAFETY DIRECTIVE: M&SD-1004, Pulley Bolt replacement has been developed and will be sent to all of SSI's customers/Spectrum wall owners.
- 3. REPLACING OF PARTS: Pulley bolts can be purchased directly from Spectrum Sports or you can call us for exact bolt specifications. Customers may do their own work on their walls if they have the proper tools and equipment or they may have Spectrum trained and certified service personnel do the replacement and annual inspection. Authorized parts and service should be ordered from Spectrum's Service Manager:

Spectrum Sports Int'l Phone: 435-792-3883 Email: <u>Service@spectrumsports.com</u>

Instructions for Replacing Pulley Bolts

Tools needed:

- (2) 15/16 wrenches

Time required:

- Minimum of 2 hours to replace pulley bolts

Directions:

- 1. Release all air pressure from Auto-Belay Units.
- 2. Replace pulley bolts and corresponding Nylock Nut.
- 3. Tighten to snug.
- 4. Add air to required pressure.
- 5. Cycle cable to make sure that all pulleys turn.

Hints:

- Use the new bolt to push out the old one or use a screwdriver to keep pulleys and spacers aligned.
- If the bolt head is between two auto-belays there is not enough room to extract the bolt. Remove the four mounting bolts for the auto-belay; slide the auto-belay to allow enough room to extract the bolt.
- The auto-belay mounting bolts require two ³/₄-inch wenches.
- The ½" Nylock Nuts must be replaced if they are removed and must be torqued to 80-ft. lbs.
- Spray nuts with WD-40 and allow to penetrate overnight.