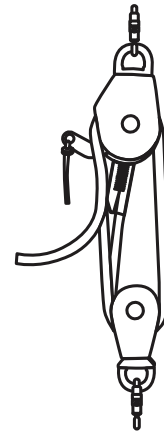




CSR² PULLEY SYSTEM



⚠ WARNINGS

Activities involving the use of this device are potentially dangerous. You are responsible for your own actions and decisions. Before using this device, you must:

- Read and understand these user instructions, labels, and warnings.
- Familiarize yourself with its capabilities and limitations.
- Obtain specific training in its proper use.
- Understand and accept the risks involved.

FAILURE TO HEED ANY OF THESE WARNINGS MAY RESULT IN SEVERE INJURY OR DEATH.

Legend



Imminent risk of serious injury or death.



Appropriate function or use.



Imminent risk of accident or injury.



Equipment incompatibility.



MEETS THE MANUFACTURED SYSTEM REQUIREMENTS OF NFPA 1983, INCORPORATED IN THE 2022 EDITION OF NFPA 2500. DO NOT DISASSEMBLE.

- 50010X-01 CSR2 PULLEY SYSTEM, RATED FOR GENERAL USE "G", MBS 40KN (8992 lbf)



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ISO 9001 Certified

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USER INFORMATION

User Information shall be provided to the user of the product. NFPA Standard 1983, incorporated into the 2022 edition of NFPA 2500 recommends separating the User Information from the equipment and retaining the information in a permanent record. The standard also recommends making a copy of the User Information to keep with the equipment and that the information should be referred to before and after each use. Additional information regarding life safety equipment can be found in NFPA 1500 and NFPA 1858 and NFPA 1983, incorporated in the 2022 edition of NFPA 2500.

SYSTEM COMPONENTS

To be compliant with NFPA 2500, this system must comprise of the following components:

- CSR2 Pulley (300343-02)
- CSR2 Double Pulley (300342-02)
- Static-Pro Lifeline (28110X or 28120X) with CMC factory sewn termination.

LIFESPAN / INSPECTION / RETIREMENT

The service life of equipment depends greatly on the type of use, intensity of use, and the environment of use. CMC does not specify an expiration date for hardware because the service life depends greatly on how and where it is used. For softgoods including rope/cord/web, CMC has set a lifespan of 10 years from the date of manufacture shown on the product label.

A single exceptional event can be cause for retirement after only one use, such as exposure to sharp edges, extreme temperatures, chemicals, or harsh environments. Any concerns about its safe use is cause for retirement. Remove retired equipment from service and destroy it to prevent further use.

A device must be retired when:

- It fails to pass inspection.
- It fails to function properly.
- It has illegible product labels or markings.
- It shows signs of damage or excessive wear.
- It has been subjected to shock loads, falls, or abnormal use.
- It has been exposed to harsh chemical reagents.
- It has an unknown usage history.
- You have any doubt as to its condition or reliability.
- When it becomes obsolete due to changes in legislation, standards, technique or incompatibility with other equipment.

Inspect the equipment according to your department’s policy for inspecting life safety equipment. CMC recommends a detailed inspection by a competent person at least once every 12 months depending on current regulations and conditions of use.

Record the date, inspector name, and inspection results in the equipment log as well as any other relevant information to track the usage history.

Before each use, the user should:

- Confirm the equipment is functioning properly.
- Verify the presence and legibility of the product labels and markings.
- Check soft components for cuts, worn or frayed areas, broken fibers, soft or hard spots, discoloration, or melted fibers. Check the stitching for pulled threads, abrasion, or breaks.
- Check hard components for excessive wear or indications of damage such as deformation, corrosion, sharp edges, cracks, or burrs. Minor nicks or sharp spots may be smoothed with emery cloth or similar.
- Check for the presence of dirt or foreign objects that can affect or prevent normal operation such as grit, sand, rocks, and debris.
- Move the release arm through its range of motion.
- Check that the Sheave is in good condition and freely rotates.

During Each Use, the user should:

- Confirm all pieces of equipment in the system are correctly positioned with respect to each other.
- Monitor the condition of the equipment and its connections to other equipment in the system.
- Do not allow anything to interfere with the operation of the equipment or its components.
- Prevent foreign objects from interfering with moving parts.

USING THE CSR² PULLEY SYSTEM

Self-tending pulleys are most often used in vertical systems with the pulley attached to a high anchor such as a tripod. When rigged with a double pulley, the mechanical advantage ratio is 4:1. The CSR² pulley is designed so that the sheave camming mechanism is only subjected to 1/4 of the load and there-fore should not be used as a conventional rope grab. It is therefore designed to be rigged in a traditional block & tackle method as pictured in Figure 1. During a raising operation, the rope will run through the pulley, and the cam will react as a ratchet to stop movement in the opposite direction. To lower, first ensure you have a firm grip on the running end of the rope, then fully release the rope-locking mechanism with the cord and begin lowering the load by feeding rope into the CSR²; preferably, for reasons of redundancy, this should be done by one person controlling the rope and another controlling the cord (release lever).

- The running end of the rope exiting the pulley from the camming mechanism should always be tended with a firm grip (Figure 1). If a firm grip cannot be maintained, tie a knot (such as a Figure-8-On-A-Bight) to prevent the rope from reversing through the system.
- Ensure that the release lever has a completely unobstructed path for release and rope-locking.
- Use only 11-13 mm diameter rope and ensure that there is always a knot at the running end of the rope.
- Do not use a double sheave pulley with only one sheave loaded.
- Wet and icy conditions may impact the performance of the pulleys. Use caution in these conditions.



RIGGING THE CSR² PULLEY SYSTEM

The CSR² Pulley System is pre-rigged with either 11 mm (7/16 in) or 12.5 mm (1/2 in) CMC Static-Pro Lifeline. Refer to the rope’s User Information for inspection, use, and care procedures. Replacement rope can be rigged in the pulley system by initially securing the factory sewn termination onto the side becket attachment. A replacement becket screw will accompany the replacement rope. The rope can then be reeved in the double pulley, alternating with the CSR² Pulley. The rope should exit the CSR² Pulley System through the camming mechanism. Refer to the diagram on the sideplate of the CSR² Pulley. Contact CMC Customer Support for replacement rope.

ROPE / CORD / WEB

Check your rope/cord/web carefully after each use to make sure there are no cuts, chafed areas, broken fibers, soft or hard spots, glazed surfaces, discoloration or variations in diameter/width. Stitching should be checked for broken threads. If any of the above are noted, or if the rope/cord/web is subject to shock loads, retire it from service. For more information on rope inspection, see ASTM 1740-96 Guide for Inspection of Nylon, Polyester, or Nylon/Polyester Blend or Both Kernmantle Rope. CMC has numerous rope manuals and guides for additional information regarding rope inspection and maintenance. Refer to CMC’s website cmcpro.com for more information about rope/cord/web inspection, maintenance, strengths, and specifications.

WARNING: Removal of protective shrink tubing is not advised as it protects the stitching and label from premature wear. Removal could jeopardize user safety and product conformance to applicable standards.

CARRYING, MAINTENANCE & STORAGE

During all use, carrying, storage, and transport keep the equipment away from acids, alkalis, exhaust emissions, rust and strong chemicals. Do not expose the equipment to direct heat, flame, or high temperatures or other adverse environmental conditions. If the equipment becomes soiled, it can be washed in cold water with a mild detergent that is safe for use with nylon and polyester. Rinse thoroughly. Do not use a pressure washer. Air dry in temperatures between 10° C and 30° C. Do not dry the equipment in direct sunlight or using an automatic dryer. Lubricate moving parts as needed. During storage and transport, protect the equipment from heat, direct sunlight, moisture, chemicals, and external loads or impacts. Do not store where the equipment may be exposed to moist air, particularly where dissimilar metals are stored together. Consult with the manufacturer in case of any doubt.

WARRANTY & REPAIRS

If your CMC product has a defect due to workmanship or materials, please contact CMC Customer Support at info@cmcpro.com for warranty information and service. CMC’s warranty does not cover damages caused by improper care, improper use, alterations and modifications, accidental damage or the natural breakdown of material over extended use and time. All repair work shall be performed by the manufacturer. All other work or modifications void the warranty and releases CMC from all liability and responsibility as the manufacturer.

SAMPLE INSPECTION & MAINTENANCE LOG

The sample log suggests records that should be maintained by the purchaser or user of life safety equipment.

EQUIPMENT INSPECTION AND MAINTENANCE LOG			
Item _____ # _____		Date in Service _____	
Brand/Model _____		Strength _____	
Date	How Used or Maintained	Comments	Name