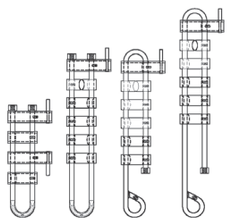
User Instructions

Quality Gear for Life

SMC RAPPEL RACK ASSEMBLY



MADE IN USA

Seattle Manufacturing Corporation
6930 Salashan Parkway
Ferndale, Washington 98248
800.426.6251 | www.smcgear.net

WARNING

- YOU COULD BE KILLED OR SERIOUSLY INJURED IF YOU DO NOT READ AND UNDERSTAND THE USER INFORMATION BEFORE USING THIS PIECE OF EQUIPMENT.
- SPECIAL TRAINING AND KNOWLEDGE ARE REQUIRED TO USE THIS EQUIPMENT.
- YOU MUST THOROUGHLY READ AND UNDERSTAND ALL MANUFACTURER'S INSTRUCTIONS BEFORE USE.
- USE AND INSPECT THIS EQUIPMENT ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.

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14012G

Information for your permanent records:
Date of Purchase: _____
Purchased From: _____
Part Number: _____

SUPPLEMENTAL NFPA INFORMATION

CLASSIFIED UL 20JF

EMERGENCY SERVICES AUXILIARY EQUIPMENT IN ACCORDANCE WITH NFPA 1983-2012.

THIS RAPPEL RACK MEETS THE AUXILIARY EQUIPMENT REQUIREMENTS OF NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES, 2012 EDITION.

THIS SMC RAPPEL RACK ASSEMBLY HAS PASSED THE MINIMUM BREAKING STRENGTH AND HOLDING LOAD TEST USING THE FOLLOWING ROPES:

(BlueWater Ropes, SafeLine, P/N 534660, 9.5mm)
(Sterling Rope, SafetyPro, P/N SP110, 11.0mm)
(PMI, Classic Pro Max, RR160BW001E, 16.0mm)

Also performs with similar ropes made by other technical rope manufacturers

This devise is designed to be used with rope diameters ranging from 9.5mm to 16mm. When tested with 9.5 to 12.5mm ropes, the devise is rated "T" for technical use loads with an MBS of 13.5kN. When tested with 11 to 16mm ropes, the devise is rated "G" for general use loads with an MBS of 22kN.

BEFORE USE

The techniques employed in the proper and safe use of this equipment may only be learned through PERSONAL instruction received from an instructor who is well-qualified in all phases of vertical rope work. Such instruction will include an evaluation of your comprehension of, and ability to perform, the tasks required to safely and efficiently use this equipment.

Never attempt its use until you have received such instruction and are believed competent by your instructor.

INSPECTION FOR USE

Visually and by touch, inspect this Rappel Rack for cracks, distortion, corrosion, scratches or gouges, sharp edges or rough areas that might abrade a rope. Compare this Rappel Rack with a new model if necessary to determine its condition. Remove each part from service if there is any doubt about its safety or serviceability.

MAINTENANCE AFTER USE

Carefully clean and dry this Rappel Rack to remove all dirt or foreign material and moisture. Minor sharp edges may be smoothed with a fine abrasive cloth, before cleaning. Store in a clean, dry place.

REMOVAL FROM SERVICE

This Rappel Rack should be removed from service if it has been dropped, or exposed to heat sufficient to alter its surface appearance, or if distortion of any part is apparent, or if any cracks are apparent, or if it has scratches or gouges of more than a superficial nature. The cost to inspect and repair a Rappel Rack that is visually damaged, or that may have been damaged by impact loading or other abuse, will exceed the cost of its replacement with a new model.

ADDITIONAL INFORMATION

Additional information regarding this type of equipment can be found in the following publications:

NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*

NFPA 1983, *Standard on Life Safety Rope and Equipment for Emergency Services.*

RECORDS

It is suggested that the user of this Rappel Rack keep a permanent record listing the date and results of each usage inspection. Such record should show, as a minimum, inspection for all of the following conditions:

- Cleanliness
- Dryness
- Freedom from scratches, gouges and sharp edges
- Freedom from corrosion
- Freedom from distortion
- Excessive wear on brake bars from rope friction
- User Information sheet present

USE OF THIS USER INFORMATION SHEET

It is suggested that this User Information sheet be retained in a permanent record after it is separated from the Rappel Rack, and that a copy of it be kept with the Rappel Rack.

It is suggested that the user refer to this User Information sheet before and after each use of the Rappel Rack.

LIFESPAN

The service life of Rappel Racks are largely dependent on the type of use and the environment used in. Under moderate use, with limited exposure to moisture, salt water, corrosive agents, excessive loads, shock loading and excessive wear, Rappel Racks may last many years. However, many events such as taking a large dynamic load, dropping, or other events which cause physical damage, can reduce the lifespan of this Rappel Rack dramatically.

You must inspect your Rappel Rack frequently and take personal responsibility for evaluating its condition and retiring unsafe gear. Inspection is extremely important, but visual inspection only will not assure that damage has not occurred. If history of the Rappel Rack is unknown or if based on the history of the use of this Rappel Rack there is any doubt regarding the safety of this Rappel Rack, it should be removed from service. You should destroy retired gear to prevent future use.

LIMITED WARRANTY

SMC products are warranted to the original retail purchaser in accordance with the full Statement of Limited Warranty printed on our web site, www.smcgear.net. Items that are claimed to be defective must be returned under a pre-assigned Return Authorization/CC Number and should include a detailed description of the conditions existing during use of the item, the place and date of the original purchase as well as a copy of the original invoice or receipt. Items being sent in for inspection may or may not be returned if the product in question is deemed potentially unsafe or non-functional.

If you do not completely understand any of the outlined user instruction provided on this sheet or if you have any questions please contact SMC at 360-366-5534 or info@smcgear.net

SEE SETUP INSTRUCTIONS ON OPPOSITE SIDE

MODEL 12110 - TWO HOLE TIE-OFF BAR, U-RACK

The Two Hole Tie-Off Bar is designed to be used in the first position and any odd numbered position on SMC 4 and 6 bar U-Rack. Its purpose is to facilitate the tie off of the rappel rack and to aid in the slowing of your descent by wrapping the rope around the extended portion of the tie-off bar. **For use with SMC Part Number 13105, 13106, NFPA14400 and NFPA14600.**

MODEL 12301 - ANGLED SLOT TIE-OFF BAR, J-RACK

The Tie-Off Bar is designed to be used in the first position on a traditional SMC Rappel Rack. Its purpose is to facilitate the tie off of the rappel rack and to aid in the slowing of your descent by wrapping the rope around the extended portion of the tie-off bar. **For use with SMC Part Number 13002, 13311, 13502 and NFPA14001, NFPA14002 and NFPA14003.**

CAUTION

Do not use the Tie-Off Bar to slow your descent when using U-Shape brake bars. The friction over the straight edge of the brake bar may cause excessive wear and/or damage to the rope potentially causing failure of the system.

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SETUP FOR USE WITH

4 BAR U-RACK ASSEMBLY - MODEL NFPA14400

6 BAR U-RACK ASSEMBLY - MODEL NFPA14600

Fig. 1 For 6-bar racks - right-handed use: Install the bottom bar with the slot facing down and the slot on the left-hand leg of the rack. Add remaining bars in an alternating pattern (i.e. slot up, slot down, etc...) keeping the slots on the left-hand side of the rack. Install the Tie Off bar last, and orient the pin on the right-hand side of the rack (opposite the slots on the lower bars).

Fig. 1

For left handed use: reverse these steps so the slots are on the right-hand leg of the rack, and the Tie Off bar pin is on the left-hand side of the rack.

For 4-bar racks: Follow instructions above. The bar configuration is as follows from the bottom to the top: polished angled slot bar, Tie Off bar (pin pointing down), black straight slot bar, and Tie Off bar (pin pointing up) Fig. 3.

Fig. 2 Replace the hex nuts and tighten with a wrench so that they both contact the Tie Off bar evenly and the nylon portion of the hex nut is fully engaged, one complete thread should protrude past the nylon.

Fig. 2

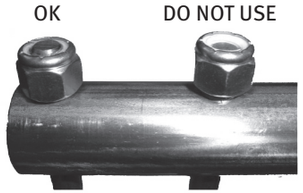


Fig. 3 All bars must be arranged in this manner so that when the rack is connected to a rope, that rope will contact each bar on the side opposite the slot.

Fig. 3

4 Bar U-Rack Tie-Off Methods:

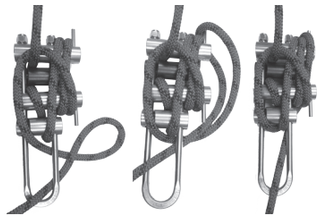
Type I: (Fast Tie-Off)

Step 1: From the normal operating position, wrap the tail end of the rope around both Tie-Off Bars increasing the friction until there is no tension on the tail—this is usually about two to three wraps.

Step 2: Bring the tail end of the rope around the leading end of the rope (where the leading end contacts the first Tie-Off Bar).

Step 3: Push a bite of rope through the legs of the frame beneath the bottom Brake Bar.

Step 4: Make a half twist clockwise in the bite of the loop and wrap the loop around the top Tie-Off Bar. Pull tight.

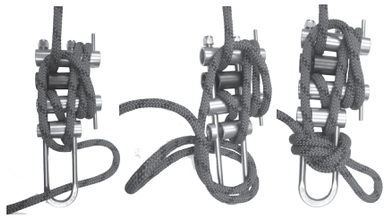


Type II (Secure Tie-Off)

Step 1: From the normal operating position, wrap the tail end of the rope around both Tie-Off Bars increasing the friction until there is no tension on the tail—this is usually about two to three wraps.

Step 2: Bring the tail end of the rope around the leading end of the rope (where the leading end contacts the first Tie-Off Bar).

Step 3: Take a large bite of rope and tie an Overhand Knot around the entire Brake Rack frame below the bottom Brake Bar. The loop of the Overhand Knot should finish towards the bottom of the Brake Rack.



(Ultimate Tie-Off)

Step 1: From the bottom Brake Bar, wrap the rope between the two Tie-Off Bars. The rope should be on back side of the top Tie-Off Bar.

Step 2: Bring the tail end of the rope around the leading end of the rope (where the leading end contacts the first Tie-Off Bar). Pull tight.

Step 3: Make one full wrap around both Tie-Off Bars ending under the bottom tie- off bar.

Step 4: Tie a Clove Hitch on a bite around the entire Brake Rack. The Clove Hitch must straddle the bottom Tie-Off Bar.

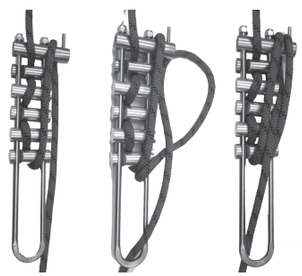
6 Bar U-Rack Tie-Off Methods:

Type I: (Fast Tie-Off)

Step 1: From the 6th Bar, wrap the tail end of the rope around the Tie-Off Bar.

Step 2: Push a bite of rope through the legs of the frame beneath the bottom Brake Bar.

Step 3: Make a half twist clockwise in the bite of the loop and wrap the loop around the Tie-Off Bar. Pull tight.



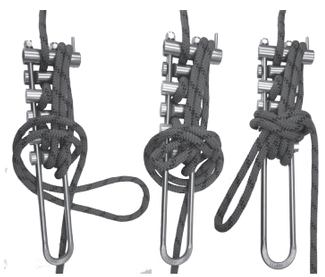
Type II: (Ultimate Tie-Off)

Step 1: From the 6th Bar, wrap the tail end of the rope around the Tie-Off Bar.

Step 2: Push a bite of rope through the legs of the frame beneath the bottom Brake Bar.

Step 3: Make a half twist clockwise in the bite of the loop and wrap the loop around the Tie-Off Bar. Pull tight.

Step 4: Take a large bite of rope and tie an Overhand Knot around the entire Brake Rack. The loop of the Overhand Knot should finish towards the bottom of the Brake Rack.



SETUP FOR USE WITH

6 BAR FLAT RACK ASSEMBLY - MODEL NFPA14001

6 BAR TWIST RACK ASSEMBLY - MODEL NFPA14002

6 BAR LONG RACK ASSEMBLY - MODEL NFPA14003

First, load all aluminum bars on short leg of rack alternating slot orientation from one bar to the next and making sure the blue straight slot bar is loaded last.

Fig. A Fig. B

Next, slide aluminum bars around top of rack so they hinge on the long leg of rack.

Next, load the Stainless Tie-Off bar so it hinges on short leg of rack and is positioned next to blue straight slot bar.

Install supplied nylon locking nut and tighten so that one complete thread protrudes past the nylon.

Note that the slot on each brake bar is facing in the opposite direction from the slot on the bars beside it. See Fig A. All bars must be arranged in this manner so that when the rack is rigged the rope will contact each bar on the side opposite the slot, as shown in Fig. B.

During use, the rope may be wrapped over the tie off bar one or two times to increase friction when heavy loads are involved or a high degree of control is required. See Fig. C & D.

To tie off the rack, jam the bars together toward the top of the rack and raise the rope in your control hand to the top of the rack and loop the rope over the extended tie-off bar section, then bring the rope down around the bottom bar as shown in Fig D.

Note – the pictures shown are the NFPA Flat Rappel Rack Assembly, rigged for typical right hand use.

Fig. C

Fig. D

Repeat action for a second loop and tie off a bite of rope crosswise around the rack for final security of the rope. Fig. E, F & G.

Fig. E

Fig. F

Fig. G

This set up and tie off information is not a substitute for the personal instruction which each user must receive, as described above. Any attempt to use an improperly rigged rappel rack can result in the sudden loss of all braking action, resulting in serious injury or death.