

# OWNER'S MANUAL

## Model # VF505

### ENERGY ABSORBING ROPE GRAB

#### Installation, Operating, Inspection and Maintenance Instructions

#### Warning

**You must read and fully understand all instructions, or have all instructions explained to you, before attempting to use this device. Equipment must not be installed, operated or inspected by anyone who does not understand this Owner's Manual. Failure to observe these instructions could result in serious injury or death. Careless or improper use of this equipment can result in serious injury or death. Training and instruction review should be repeated at regular intervals. If you have any questions regarding these instructions or need additional copies, call Gemtor toll free at 800-405-9048.**

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#### DESCRIPTION

The Model # VF505 is a small rope grabbing device that can be positioned at any point along a vertical lifeline. If a fall occurs, the rope grab locks on the rope and absorbs much of the force generated during the free fall. The unique energy absorbing design of the Model # VF505 allows the user to use a standard rope or web lanyard and still meet OSHA's maximum force requirements. Although the Model # VF505 meets OSHA's energy absorber requirements on both  $\frac{5}{8}$ " and  $\frac{3}{4}$ " rope, we recommend the use of an energy absorbing lanyard when using the grab on  $\frac{3}{4}$ " rope to increase worker comfort in the case of a fall. Since the Model # VF505 is an energy absorber, the user must allow for up to 42" of deceleration distance when calculating necessary fall space.

#### BEFORE USE

- Inspect the rope grab for any damage, dirt, oil, grit, paint, etc. Refer to "HOW TO CLEAN EQUIPMENT" section (page 4) if necessary.
- Make sure the lifeline is the proper type and size. ( $\frac{5}{8}$ " -  $\frac{3}{4}$ " dia. synthetic rope with minimum tensile strength of 5,000 lbs.)
- Tie-off the bottom end of the lifeline vertically below the anchorage point to eliminate excess slack.

#### RECOMMENDED ROPE

The Model # VF505 Rope Grab has been designed and tested to perform properly on the following types of Lifelines:  
Gemtor  $\frac{5}{8}$ " -  $\frac{3}{4}$ " Nylon, polyester, poly-blend and HSP.  
Make sure to allow for lifeline elongation when determining the amount of clearance needed in case of a fall. Nylon ropes can elongate significantly under load.

#### INSTRUCTIONS

The anchor point of a lanyard or decelerating device attached to a lifeline, or a lanyard or decelerating device attached to a fixed anchorage shall be located above the worker's harness attachment. The fixed anchorage to which a lifeline, lanyard, or decelerating device is attached, shall be capable of supporting at least 5,000 lbs. per worker.

Lanyards shall be kept as short as possible to minimize free fall distance. **Free fall distance shall not exceed 6 feet.** The use of a lanyard 3 ft. or less will ensure a free fall of no more than 6 ft. When it is impossible or impractical to use a 3 ft. or shorter lanyard, extra care must be taken to ensure that the rope grab is positioned at or above the connection point on the harness at all times. Under no circumstances shall the lanyard length exceed 6 ft.

When the working location is reached, the worker should raise the rope grab as high as the lanyard allows and push downward on the handle to lock the rope grab on the lifeline.

**Warning: Never attach more than one worker to the rope grab. As required by OSHA, each employee must have a separate lifeline.**

#### FREE FALL CONSIDERATIONS







Free fall distance should be kept to a minimum, and as required by OSHA, in no case shall be greater than 6 feet. To help assure this, the tie-off attachment point to the lifeline or anchor should be located at or above the connection point of the fall arrest equipment to the harness.

**INSPECTION**

Users should establish their own formal routine inspection according to prevailing conditions with a minimum of two formal inspections per year. Visual inspection is required before each use, for wear, damage and other deterioration, and defective components shall be removed from service.

**INSTALLATION ON LIFELINE**

Use only 5/8" – 3/4" dia. recommended synthetic rope with minimum tensile strength of 5,000 lbs.

		
1) Depress the button on the safety locking pin and remove from main assembly	2) Swing cam and lever assembly up and open.	3) Place rope grab on rope with direction arrow pointing up.
		
4) Close assembly, align holes and reinsert safety locking pin.	5) Make sure that locking pin balls appear on outside of main assembly.	6) Check locking action by pulling down on rope grab handle.

**CAUTIONS**

Items subject to FALL ARREST or IMPACT FORCES must be immediately removed from service and destroyed. Any item showing EXCESSIVE WEAR OR DETERIORATION should be destroyed. Inspect all equipment before each use. Failure to observe proper inspection and usage procedures could result in INJURY or DEATH. ENVIRONMENTAL HAZARDS must be considered in selecting the appropriate lifeline, harness and lanyard. Recommendations where chemicals, high temperature or other unusual conditions exist may be addressed to GEMTOR.

**EMPLOYEE TRAINING CONSIDERATIONS**

Thorough employee training in the selection and use of personal fall arrest systems is imperative. Before the equipment is used, employees must be trained in the safe use of the system. This shall include: application limits; proper anchoring and tie-off techniques; estimation of free fall distance, including determination of deceleration distance, and total fall distance to prevent striking a lower level; methods of use; and inspection and storage of the system. Safety lines, Lanyards, Safety Belts and Harnesses must be utilized in strict accordance with the manufacturer's recommendations. Determination of suitability of any fall protection device for specific use is the responsibility of the user. Questions concerning suitability may be address to GEMTOR.

**TIE-OFFS**

Employers and employees should at all times be aware that the strength of a personal fall arrest system is based on its being attached to an anchoring system which does not reduce the strength of the system (such as a properly dimensioned eye-bolt/snap-hook anchorage). Therefore, if a means of attachment is used that will reduce the strength of the system, that component should be replaced by a stronger one, but one that will also maintain the appropriate maximum arrest force characteristics. Employers and employees must realize the reduction in strength caused by certain tie-offs (such as using knots, tying around sharp edges, etc.). Tie-offs using a knot in a rope lanyard or lifeline (at any location) can reduce the lifeline or lanyard strength by 50 percent or more. Tie-off of a rope lanyard or lifeline around an "H" or "I" beam or similar support can reduce its strength as much as 70 percent due to the cutting action of the beam edges. Such tie-offs should be avoided or alternative tie-off rigging should be used. Such alternatives may include use of a snaphook/D-ring connection, wire rope tie-off, an effective padding of the surfaces, or an abrasion-resistance strap around or over the problem surface. Care should be exercised in selecting dimensionally correct anchor points to avoid accidental disengagement of snaphooks not designed to be compatible for the connection.

**HOW TO CLEAN EQUIPMENT**

Your Rope Grab has been carefully manufactured of stainless steel, to provide you with a safety device which is as rugged and simple to use as possible. However, it must be realized that this equipment must be carefully used and maintained in order that when it is called upon to act as a safety device, it will operate correctly. It must be cleaned to operate properly. In order to be kept clean, it is necessary that it be washed each day with a liquid which will dissolve or wash away all contaminates. Cement dust and fly ash should be washed away with water, possibly with a slight amount of soap added. Paint should be dissolved with a paint thinner suitable for the paint being used. Epoxies and waterproofing materials should be removed by immersion in a solvent recommended by the company which manufactures the material being used. It is recommended that a can of solvent be kept at the point of usage of the rope grab, and that the rope grab be left in the solvent overnight. By so doing, the rope grab should be completely cleaned by morning, when it can be wiped off and put to use.

***This rope grab is a personal protective device and should be used for fall protection only! Other uses are contrary to its design and may result in serious injury or death.***

**CARELESS OR IMPROPER USE OF THIS EQUIPMENT CAN RESULT IN SERIOUS INJURY OR DEATH.**