# MSA ROSE

# USER INSTRUCTIONS DYNA BRAKE<sup>™</sup> WITH LARGE SNAPHOOK ANCHORAGE CONNECTOR

# WARNING

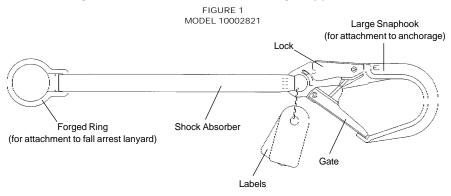
National standards and state, provincial and federal laws require the user to be trained before using this product. Use this manual as part of a user safety training program that is appropriate for the user's occupation. These instructions must be provided to users before use of the product and retained for ready reference by the user. The user must read, and understand (or have explained), and heed all instructions, labels, markings and warnings supplied with this product and with those products intended for use in association with it. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR DEATH.

# 1.0 SPECIFICATIONS

- The Rose Dyna Brake with Large Snaphook Anchorage Connector meets OSHA requirements, ANSI A10.14 Type 1 and ANSI Z359.1 standards.
- The Dyna Brake with Large Snaphook has a minimum breaking strength of 5,000 lbf (22.2 kN).
- The Dyna Brake with Large Snaphook textile element is constructed of nylon webbing with a minimum breaking strength, when new, of 6,000 lbf (26.6 kN). Hardware elements are forged alloy steel, zinc plated, with a minimum breaking strength of 5,000 lbf (22.2 kN), proof tested to 3,600 lbf (16 kN).
- The Dyna Brake with Large Snaphook is designed for the attachment of a single personal fall arrest system.
- Free fall distance (limit) must not exceed 6.0 ft (1.3 m) in accordance with OSHA and ANSI Z359.1. ANSI A10.14 specifies that free fall distance must not exceed 5 ft (1.5 m). The user must comply with applicable standards and regulations.
- When used as part of a personal fall arrest system, fall arresting forces permitted by the shock absorber do not exceed 900 lbf (4.0 kN). Elongation will not exceed 42 in (1.06 m).
- Capacity range is 130 lbs (59 kg) to 310 lbs (140 kg) including weight of the user plus clothing, tools and other user-borne objects.
- Net weight is 2.3 lbs (1.0 kg).

# 2.0 DESCRIPTION

The Dyna Brake with Large Snaphook is a component designed specifically for coupling a single personal fall arrest system to an anchorage. The Dyna Brake with Large Snaphook is a temporary, overhead anchorage connector intended for use on such anchorages as pipes or structural steel.



# 3.0 SELECTION & APPLICATION

# 3.1 PURPOSE OF LARGE HOOK & STRAP WITH SHOCK ABSORBER

The Dyna Brake with Large Snaphook is primarily a component of a personal fall arrest system, serving as an anchorage connector with integral shock absorber for fall arrest.

Use of the Dyna Brake with Large Snaphook must comply with these User Instructions, and further, is subject to approval under the user's safety rules and regulations and by the user's safety director, supervisor or qualified safety engineer. Be certain the selection of the Dyna Brake with Large Snaphook is suited for the intended use and work environment. If there is any conflict between these User Instructions and other directives or procedures of the user's organization, do not use the Dyna Brake with Large Snaphook until such conflicts are resolved. Consult all local, state and federal Occupational Health and Safety Administration (OSHA) requirements for personal safety equipment. Also refer to the latest revision of ANSI Z359.1 and ANSI A10.14 standards for more information on anchorage connectors and associated system components.

# 3.2 LIMITATIONS

The following applications limitations must be considered and planned for before using the Rose Dyna Brake with Large Snaphook.

# 3.2.1 PHYSICAL LIMITATIONS

The Dyna Brake with Large Snaphook is designed for one person with a combined total weight no greater than 310 lbs (140 kg), including clothing, tools and other user-borne objects.

#### 3.2.2 ABRASION AND SHARP EDGES

Avoid contact with sharp edges and surfaces which may abrade the product webbing and reduce its strength.

#### 3.2.3 CHEMICAL HAZARDS

Acidic, alkaline or other environments with harsh substances may damage the hardware elements of the Dyna Brake with Large Snaphook. If working in a chemically aggressive environment, consult Rose Manufacturing Company to determine which anchorage connector material is better for your specific conditions. When working in the presence of chemicals, more frequent inspection of the Dyna Brake with Large Snaphook is required.

#### 3.2.4 CORROSION

Do not expose the Dyna Brake with Large Snaphook to corrosive environments for prolonged periods. Organic substances and salt water are particularly corrosive to metal parts. When working in corrosive environments, more frequent inspection, cleaning and drying of the Dyna Brake with Large Snaphook is required.

#### 3.2.5 ELECTRICAL HAZARDS

Use extreme caution when working near energized electrical sources. Metal hardware will conduct electric current. Maintain a safe working distance (preferably at least 10 feet -3 m) from electrical hazards.

#### 3.2.6 IMPACT FORCES

Any Dyna Brake with Large Snaphook Anchorage Connector which has been subjected to the forces of arresting a fall must be immediately removed from service and marked as "UNUSABLE" until destroyed.

#### 3.3 COMPATIBILITY OF SYSTEM PARTS

#### 3.3.1 COMPATIBILITY OF COMPONENTS AND SUBSYSTEMS

Rose Dyna Brake with Large Snaphook Anchorage Connectors are designed to be used with Rose approved components and connecting subsystems. Use of the Dyna Brake with Large Snaphook with products made by others that are not approved in writing by Rose may adversely affect the functional compatibility between system parts and the safety and reliability of the complete system. Connecting subsystems must be suitable for use in the application (e.g. fall arrest, climbing protection, restraint, rescue or evacuation). Rose Manufacturing Company produces a complete line of connecting subsystems for each application. Contact Rose for further information. Refer to the manufacturer's instructions supplied with the component or connecting subsystem to determine suitability. For fall arrest applications using Rose Dyna Brake with Large Snaphook Anchorage Connectors, the shock absorber should be used in conjunction with a compatible Rose lanyard meeting the requirements of ANSI Z359.1 or A10.14. Contact Rose Manufacturing Company with any questions regarding compatibility of equipment used with the Rose Dyna Brake with Large Snaphook Anchorage Connector.

#### 3.3.2 COMPATIBILITY OF CONNECTORS

Connectors, such as D-rings, snaphooks, and carabiners, must be rated at 5,000 lbf (22 kN) minimum breaking strength. Rose connectors meet this requirement. Connecting hardware must be compatible in size, shape, and strength. Non-compatible connectors may accidentally disengage ("rollout"). Always verify that the connecting snaphook or carabiner and the D-ring on the harness or anchorage connector are compatible. Use only self-closing, self-locking snaphooks and carabiners (as defined and required by ANSI Z359.1).

#### 3.3.3 ANCHORAGES AND ANCHORAGE CONNECTORS

Anchorages for personal fall arrest systems must have a strength capable of supporting a static load, applied in directions permitted by the system, of at least: (a) 3,600 lbf (16 kN) when certification exists, or (b) 5,000 lbf (22.2 kN) in the absence of certification. See ANSI Z359.1 for definition of certification. When more than one personal fall arrest system is attached to an anchorage, the anchorage strengths set forth in (a) and (b) must be multiplied by the number of systems attached to the anchorage. See ANSI Z359.1, section 7.2.3. This requirement is consistent with OSHA requirements under 20 CFR 1910, Subpart F, Section 1910.66, Appendix C. In addition, it is recommended that the user of personal fall arrest systems refer to ANSI Z359.1, Section 7, for important considerations in equipment selection, rigging, use, and training.

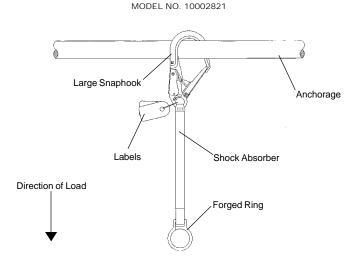
The Dyna Brake with Large Snaphook Anchorage Connector is not suited for supporting side loads. Installation must be planned so that potential fall arrest loads are applied vertically and directly below the anchorage connector.

# 4.0 INSTALLATION OF DYNA BRAKE WITH LARGE SNAPHOOK

Install the Dyna Brake with Large Snaphook on a suitable anchorage of compatible size, shape and compatible strength with this product.

- Step 1: Open the large snaphook by grasping the body and squeezing the lock, opening the gate.
- Step 2: Place the large snaphook over the anchorage and release the gate. Snaphook will automatically close and lock. Always check!
- Step 3: Inspect the installation. The D-ring on the end of the product should hang down directly above the work area. The snaphook should completely enclose the anchorage and be securely closed and locked. Refer to Figure 1.

**FIGURE 1** 



The D-ring on the end of the Dyna Brake with Large Snaphook is designed for attachment of a compatible, locking snaphook of the user's personal fall arrest subsystem.

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Do not leave the Dyna Brake with Large Snaphook installed in environments which could cause damage or deterioration to the product. Avoid contact with objects which may interfere with the function of the large snaphook. Refer to sections 5 and 7 for care and inspection details. Do not leave unattended loads on the Dyna Brake with Large Snaphook Anchorage Connector.

#### 4.3 MAKING CONNECTIONS

When using a snaphook or carabiner to connect to an anchorage or when coupling components of the system together, be certain accidental disengagement ("rollout") cannot occur. Rollout is possible when interference between a carabiner and the mating connector causes the carabiner's gate or keeper to accidentally open and release. Rollout occurs when a carabiner is snapped into an undersized ring such as an eye bolt or other non-compatibly shaped connector. Only self closing, self-locking snaphooks and carabiners should be used to reduce the possibility of rollout when making connections. Do not use snaphooks or connectors that will not completely close over the attachment object. Do not make knots in a lanyard. Do not hook a lanyard back onto itself. Snaphooks and carabiners must not be connected to each other. Do not attach two snaphooks or carabiners into one D-ring. Do not attach snaphooks or carabiners directly to a horizontal lifeline. Always follow the manufacturer's instructions supplied with each system component.

# 4.4 REMOVAL OF THE LARGE HOOK & STRAP WITH SHOCK AB-SORBER

Before attempting removal of the Dyna Brake with Large Snaphook Anchorage Connector, disconnect all loads and attachment elements from the Anchorage Connector D-ring. Return the Dyna Brake with Large Snaphook to the appropriate person in the user's organization for cleaning, inspection and storage.

# 5.0 CARE, MAINTENANCE AND STORAGE

# 5.1 CLEANING INSTRUCTIONS

Clean the Dyna Brake with Large Snaphook with a solution of water and mild laundry detergent. Dry hardware with a clean cloth and hang to air dry. Do not speed dry with heat. Excessive accumulation of dirt, paint or other foreign matter may prevent proper function of the Dyna Brake with Large Snaphook. Questions concerning Dyna Brake with Large Snaphook conditions and cleaning should be directed to Rose Manufacturing Company.

# 5.2 MAINTENANCE AND SERVICE

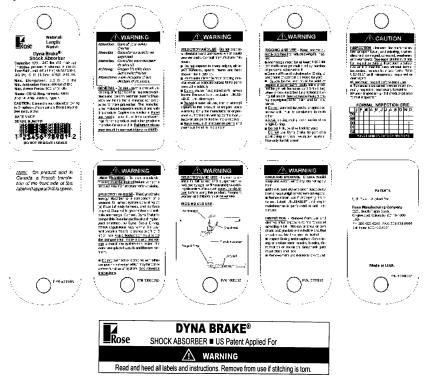
Equipment which is damaged or in need of scheduled maintenance must be tagged as "UNUSABLE" and removed from service. Corrective maintenance (other than cleaning) and repair, such as replacement of elements, must be performed by Rose. Do not attempt repairs.

# 5.3 STORAGE

Store the Dyna Brake with Large Snaphook in a cool, dry and clean place out of direct sunlight. Avoid areas where heat, moisture, light, oil, and chemicals or their vapors or other degrading elements may be present. Equipment which is damaged or in need of scheduled maintenance should not be stored in the same area as usable equipment. Heavily soiled, wet, or otherwise contaminated equipment should be properly maintained (e.g. dried and cleaned) prior to storage. Prior to using equipment which has been stored for long periods of time, a Formal Inspection should be performed by a competent person.

# 6.0 MARKINGS & LABELS

The following labels must be present, legible and securely attached to the Dyna Brake with Large Snaphook.



(labels shown here not actual size)

# 7.0 INSPECTION

# 7.1 INSPECTION FREQUENCY

The Dyna Brake with Large Snaphook must be inspected by the user before each use and, additionally, by a competent person other than the user at intervals of no more than six months. The competent person inspection is referred to as Formal Inspection.

# CAUTION

If the Dyna Brake with Large Snaphook Anchorage Connector has been subjected to fall arrest or impact forces, it must be immediately removed from service and marked as "UNUSABLE" until destroyed.

# 7.2 INSPECTION STEPS

Step 1: Inspect the Dyna Brake with Large Snaphook labels to verify that they are present and legible. See section 6 for the specific labels that should be present and the information contained on those for the model number shown on page one (1) of these instructions. Check the Formal Inspection Grid to be sure a Formal Inspection has been performed within the last six months. If the Grid does not indicate that a Formal Inspection has been

performed within the last six months (by being punched), or if any labels are missing or illegible, remove the Dyna Brake with Large Snaphook from use and mark it as "UNUS-ABLE" until a Formal Inspection is performed by a competent person.

- Step 2: Inspect the hardware elements for deformations, fractures, cracks, corrosion, deep pitting, sharp edges, cuts, deep nicks and evidence of excessive heat or chemical exposures. Inspect snaphook function. Snaphook must automatically close and lock.
- Step 3: Inspect the webbing and stitches for wear, abrasion, cuts, frayed, missing or loose stitches, burns or signs of chemical attack. The green shock absorber cover must be intact.
- Step 4: Inspect the plastic labels for presence and legibility.
- Step 5: Inspect shock absorber for deployment: ripped stitches will be visible if Dyna Brake has been subjected to the forces of arresting a fall. Remove from use if shock absorber has deployed.
- Step 6: Inspect each component and subsystem of the complete system in accordance with the associated manufacturer's instructions.

#### 7.3 CORRECTIVE ACTION

When inspection in accordance with section 7 reveals signs of wear, damage or inadequate maintenance, the Dyna Brake with Large Snaphook must be immediately removed from service and marked as "UNUSABLE" until destroyed. Defects, damage, excessive wear, malfunction, and aging are generally not repairable. If detected, immediately remove the Dyna Brake with Large Snaphook from use and mark it as "UNUSABLE' until destroyed. For final disposition, submit the Dyna Brake with Large Snaphook to a competent person who is authorized to perform Formal Inspection. If there is any question as to repairability, contact Rose or a service center authorized in writing by Rose before further use of the product.

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Only Rose Manufacturing Company or parties authorized in writing may make repairs to this equipment.

# 8.0 INSPECTION GRID

Punch month of first use.

	J	F	М	А	М	J	J	А	S	0	N	D
1st												
2nd												
3rd												
4th												
5th												
6th												

#### WARRANTY

Express Warranty - Rose/MSA warrants that the product furnished is free from mechanical defects or faulty workmanship for a period of one (1) year from first use or eighteen (18) months from date of shipment, whichever occurs first, provided it is maintained and used in accordance with Rose/MSA's instructions and/or recommendations. Replacement parts and repairs are warranted for ninety (90) days from the date of repair of the product or sale of the replacement part, whichever occurs first. Rose/MSA shall be released from all obligations under this warranty in the event repairs or modifications are made by persons other than its own authorized service personnel or if the warranty claim results from misuse of the product. No agent, employee or representative of Rose/MSA may bind Rose/MSA to any affirmation, representation or modification of the warranty concerning the goods sold under this contract. Rose/MSA makes no warranty concerning components or accessories not manufactured by Rose/MSA, but will pass on to the Purchaser all warranties of manufacturers of such components. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES. EXPRESS. IMPLIED OR STATUTORY, AND IS STRICTLY LIMITED TO THE TERMS HEREOF. ROSE/ MSA SPECIFICALLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FIT-NESS FOR A PARTICULAR PURPOSE. For additional information please contact the Customer Service Department at 1-800-MSA-2222 (1-800-672-2222).

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