



FOLDING DAVIT PIN
FOLDING DAVIT SERIAL NO.
MOUNTING BASE PIN
MOUNTING BASE SERIAL NO.

# USER INSTRUCTIONS

## ROSE FOLDING DAVIT AND MOUNTING BASE

### 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, 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 MODELS AND SPECIFICATIONS

TABLE 1. ROSE FOLDING DAVIT AND MOUNTING BASES COVERED BY THESE INSTRUCTIONS

MODEL NUMBER	DESCRIPTION	MATERIAL	APPROXIMATE WEIGHT	
			LBS.	KG
506613	FOLDING DAVIT	ALLOY STEEL	47	21.3
506614	MOUNTING BASE	CARBON STEEL	32	14.5
506623	MOUNTING BASE	STAINLESS STEEL	32	14.5

TABLE 2. ROSE FOLDING DAVIT COMPANION COMPONENTS COVERED BY THESE INSTRUCTIONS

MODEL NUMBER	DESCRIPTION	MATERIAL	APPROXIMATE WEIGHT	
			LBS.	KG
506362	MOUNTING ASSY. FOR 95 FT. DYNEVAC OR DYNA LOCK	ALUMINUM & CARBON STEEL	18	8.2
506622	MOUNTING ASSY. FOR 50 FT DYNEVAC OR DYNA-LOCK	ALUMINUM & CARBON STEEL	13.5	6.1
506222	SPLIT-MOUNT PULLEY	ALLOY STEEL WITH ALUMINUM PULLEY	4	1.8

## 1.1 SPECIFICATIONS - ROSE FOLDING DAVIT AND MOUNTING BASE

- The folding davit and mounting base, when used with the Dyna-Lock or Dynevac and mounting bracket, meets ANSI Z359.1-1992, and ANSI A10.14-1991, applicable OSHA regulations dealing with fall arrest systems. These instructions and the labels on the product fulfill the requirements of those standards and regulations.
- The folding davit and mounting base must be used together. They are designed for use in systems to lift and lower personnel and materials. They may also be used to anchor a personal fall arrest system when the user is being lifted and lowered.
- The folding davit has a head clearance of 77 in (1.9 m) and a reach of 24 in (0.6 m).
- Capacity is 310 lb (140 kg) including weight of the user plus clothing, tools and other user-borne objects; 620 lbs (280 kg) for materials.
- The folding davit pivots 360° for personnel and material handling.
- The folding davit and mounting base meet the applicable requirements of OSHA regulation 29 CFR 1910.146 and ANSI Z117.1.

## 2.0 TRAINING

It is the responsibility of the purchaser of the folding davit and mounting base to assure that product users are made familiar with these User Instructions and trained by a competent person in: (1) workplace hazard awareness and hazard identification, evaluation and control; (2) how to properly select, inspect, use, store and maintain the folding davit and associated equipment; (3) how to select and make connections to anchorages and anchorage connectors; (4) proper attachment locations and proper attachment methods including compatibility of connections to reduce the probability of accidental disengagement ("rollout"); (5) how to evacuate from a hazardous space; (6) what to do after a fall to protect the user from injury, including emergency rescue planning and execution; and (7) the consequences of improper use of the equipment and of failure to follow instructions and training. If the folding davit is to be used for confined space applications, the user must also be trained in accordance with the requirements of OSHA regulation 29 CFR 1910.146 and ANSI Z117.1. Training must be conducted without undue exposure of the trainee to hazards. The effectiveness of training should be periodically assessed (at least annually) and the need for more training or retraining determined. Rose Manufacturing Company offers training programs. Contact Rose for training information.

## 3.0 HAZARDS IDENTIFICATION, EVALUATION AND CONTROL



***Do not use the folding davit unless a qualified person has inspected the workplace and determined that use of the folding davit is essential and that identified hazards can neither be eliminated nor exposures to them prevented.***

Prior to selecting a folding davit or other personal protective equipment, the user must make a workplace assessment of hazards and conditions where the equipment is required. Such assessment must, at a minimum, identify the presence of:

- Hot objects
- Electrical hazards
- Environmental contaminants
- Heat-producing operations
- Chemicals
- Moving equipment
- Unstable/uneven surfaces
- Sharp objects
- Flames
- Abrasive surfaces
- Weather factors
- Unguarded openings
- Confined space hazards
- Climatic factors
- Sparks
- Moving materials
- Slippery surfaces

Foreseeable changes in any of these conditions, taken individually or collectively, must be identified. The materials and construction of the folding davit and associated equipment must be considered in the selection process such that these workplace conditions are suitably addressed and responded to. The equipment must match the work situation and workplace environmental factors.

The workplace assessment must identify all paths of intended user movement and all hazards along such paths. The user must identify the required range of mobility in each hazard zone and note the location and distance to all obstructions in potential fall paths. Lateral obstructions which could be contacted in a pendular fall arrest must be noted. If the folding davit and mounting base are to be used for personnel-riding system, it must be backed up by a personal fall arrest system incorporating a self-retracting lanyard (SRL). The SRL connecting the user's harness to the folding davit anchorage connection must be selected so as to satisfactory limit total fall distance. If the folding davit and mounting base are to be used for confined space entry operations, the workplace assessment must comply with the requirements of OSHA regulation 29 CFR 1910.146 and ANSI Z117.1.

## 4.0 DESCRIPTION OF FOLDING DAVIT

### 4.1 FOLDING DAVIT (REFER TO FIGURE 1).

The folding davit consists of a zinc plated alloy steel upper and lower tube connected by a hinged bracket. It is supported in the vertical position by the mounting base. The hinged bracket design permits folding of the unit to permit easy transportability when removed from the base. The folding davit is designed to permit mounting of a side-mount Dyna-Hoist to one end of the upper tube and a split-mount pulley to the other. The davit will swivel until a load is applied, thereby holding the davit in position for lifting and lowering. A Dynevac or Dyna-Lock may be installed on the lower tube thus providing an anchorage connector for fall arrest capability.

### 4.2 MOUNTING BASE (REFER TO FIGURE 1).

The mounting base is the means by which the folding davit is attached to a structural anchorage. The base is permanently secured to the anchorage at floor level by six (6) bolts, 5/8-inch diameter, Grade 5, supplied by the end user. A tube, welded to the base is constructed of carbon steel with zinc plating. A stainless steel mounting base is available for corrosive environments.

### 4.3 MOUNTING BRACKET FOR 95 FT. (30M) DYNEVAC/DYNA-LOCK (PART NO. 506362).

### MOUNTING BRACKET FOR 50 FT. (16M) DYNEVAC/DYNA-LOCK (PART NO. 506622).

The 95/50 ft. (30/16M) Dynevac/Dyna-Lock mounting bracket is the means by which the 95/50 ft (30/16M) Dyna-Lock or Dynevac is attached to the lower Davit tube. The mounting bracket is secured to the lower davit tube by a steel clevis pin. The clevis pin and mounting bracket allow simple mounting of the 95/50 ft (30/16M) Dyna-Lock or Dynevac to the Davit. The mounting bracket is constructed of cast aluminum alloy and carbon steel with zinc plating.

### 4.4 SPLIT-MOUNT PULLEY (PART NO. 506222).

The split-mount pulley is the means for connecting the Dyna-Hoist cable to the upper tube to provide lifting and lowering of personnel/materials.

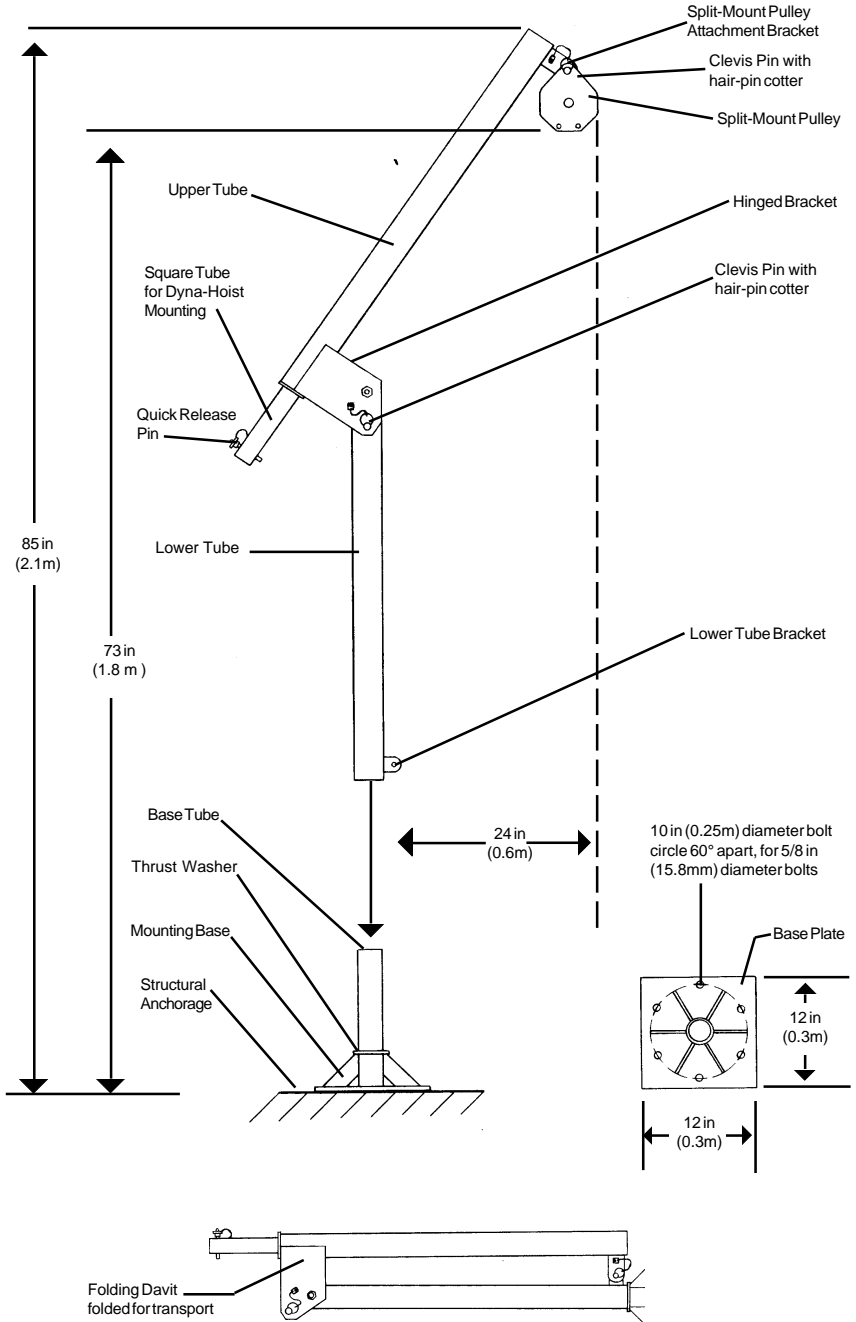


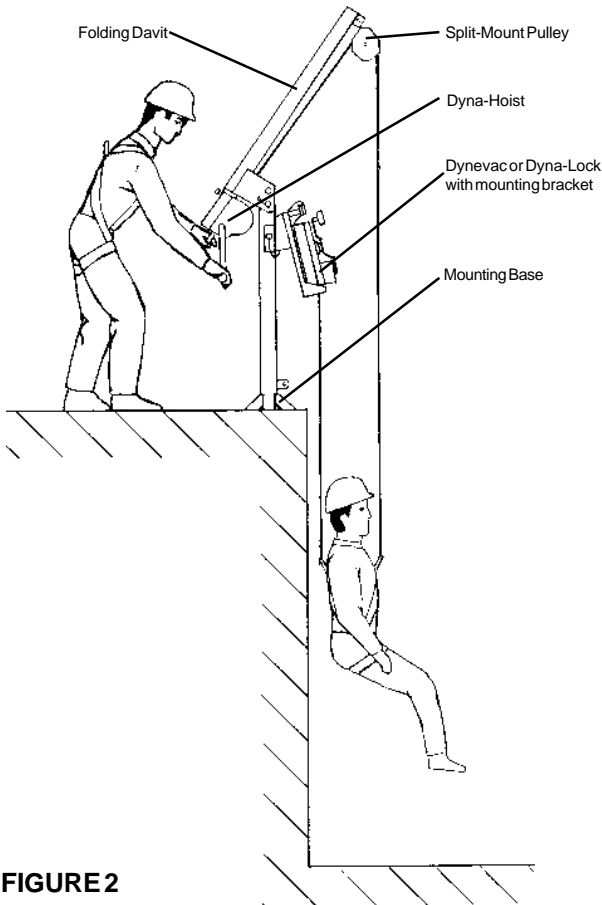
FIGURE 1

## 5.0 CARABINER SELECTION AND APPLICATION

### 5.1 PURPOSE OF THE FOLDING DAVIT SYSTEM

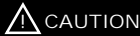
The primary purpose of the folding davit and mounting base is to provide a means for anchoring a personnel/materials-handling hoist to a structural anchorage and, thus, enable lifting, lowering, and suspension of personnel and materials from its location above a work space. Secondly, the folding davit serves as an anchorage connector for a self-retracting lanyard (SRL) providing personal fall arrest capability for a worker connected to the SRL (refer to Figure 2). The system is designed to support a maximum working load of 310 lbs (140 kg) for personnel (total weight including clothing and tools) and 620 lbs (280 kg) for materials. The system is designed to support only one person at time.

Use of the folding davit 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 a qualified safety engineer. Be certain the selection of the folding davit and mounting base 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 folding davit 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 full body harnesses and associated system components. In Canada, refer to provincial and federal regulations.



**FIGURE 2**

## 5.2 INSTALLATION



***Installation of the folding davit with mounting base should be performed under the guidance of a qualified person***

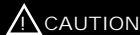
### 5.2.1 INSTALLING THE MOUNTING BASE

Begin by selecting a structural anchorage of sufficient strength to support a minimum vertical load of 2,400 lbs. (10.7 kN) applied at the end of the folding davit or 5,000 lbs (22.2 kN) applied at the end of the Dynevac/Dyna-Lock mounting bracket. This load must be applied at any angle which the user's movement or path may cause. The structural anchorage must have a flat surface of at least 12 in (0.3 m) x 12 in (0.3 m) square on which the base will rest. The anchorage location should be chosen to allow the folding davit pulley to be placed directly over the confined space opening or the edge of the walking/working surface. In order to operate the system properly, sufficient working space must be provided around the davit.

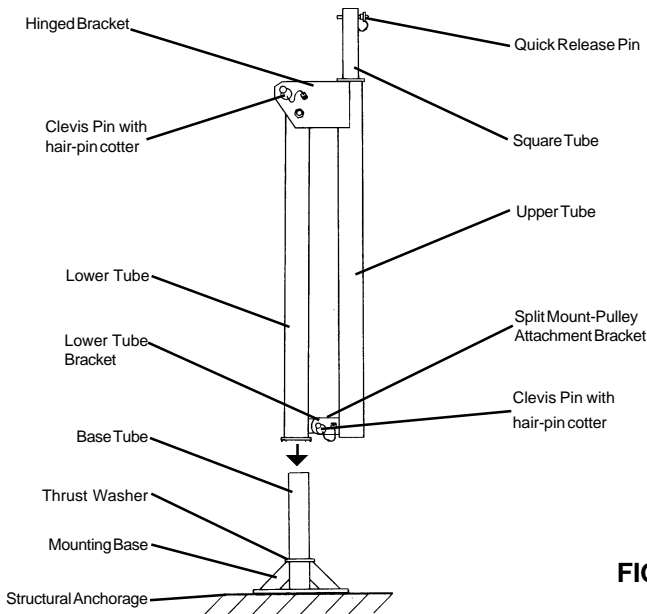
Position the mounting base directly on the working surface maintaining perpendicularity of the upright tube with the surface. The base must not be more than one foot above the adjacent work surfaces unless provisions are made for the operating attendant to reach the Dyna-Hoist and other equipment attached to the folding davit. The base is secured to the anchorage structure using six (6) bolts, grade 5, 5/8-inch hex nuts and washers. Torque nuts to 150 pound-foot (203 N-m).

### 5.2.2 INSTALLING THE FOLDING DAVIT

Lift the folding davit above the mounting base and slide the lower tube over the base tube. The davit should seat completely onto the base tube and rotate freely in place (see Figure 3).



***Inspect the installation to verify each bolt is in correct position and properly tightened, and verify that the folding davit is fully seated before continuing.***



**FIGURE 3**

### 5.3 USAGE LIMITATIONS

The following applications limitations must be considered and planned for before using the folding davit and mounting base.

#### 5.3.1 PHYSICAL LIMITATIONS

The folding davit and mounting base are designed for use by one person with a combined total weight no greater than 310 lbs (140 kg), including clothing, tools, and other user-borne objects. Persons with muscular, skeletal, or other physical disorders should consult a physician before using. Pregnant women and minors must never use the folding davit and mounting base. Increasing age and lowered physical fitness may reduce a person's ability to withstand shock loads during fall arrest or prolonged suspension. Consult a physician if there is any question about physical ability to safely use this product to arrest a fall or suspend.

#### 5.3.2 CHEMICAL HAZARDS

Acidic, alkaline, or other environments with harsh substances may damage the plating and hardware elements of the folding davit and mounting base. When working in the presence of chemicals, more frequent inspection of the folding davit and mounting base is required.

#### 5.3.3 CORROSION

Do not expose the folding davit and mounting base 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 folding davit and mounting base is required. See sections 9, 11 and 12 for cleaning and inspection details.

#### 5.3.4 ELECTRICAL HAZARDS

Use extreme caution when working near energized electrical sources. Metal construction of the folding davit and mounting base and other components connected to them will conduct electric current. Maintain a safe working distance (preferably at least 10 ft (3 m)) from electrical hazards.

#### 5.3.5 MOVING MACHINERY

When working about moving machinery (e.g. conveyors, rotating shafts, presses, etc.), maintain a safe working distance from machinery parts which could entangle clothing, this product, or other components connected to it.

#### 5.3.6 WEAR AND DETERIORATION

Any folding davit and mounting base which shows signs of excessive wear or deterioration must be removed from use and marked "UNUSABLE" until destroyed. See sections 11 and 12 for detailed inspection procedures.

#### 5.3.7 IMPACT FORCES

Any folding davit and mounting base which has been subjected to the forces of arresting a fall must be immediately removed from service and marked as "UNUSABLE" until destroyed or returned to Rose Manufacturing, or other person authorized in writing by Rose for inspection and repair.

### 5.3.8 GENERAL PRECAUTIONS

- Do not use the pulley attachment bracket for fall arrest
- Hoist and SRL lines **MUST NOT** contact sharp edges or abrasive surfaces.
- Always keep body parts and clothing away from pinch points at hinge bracket.
- During erection of the folding davit, pivot the folding davit so as not to strike a person or object with the end of the folding davit.
- **ALWAYS MAINTAIN A FIRM GRIP ON DAVIT WHEN ROTATING. DAVIT AND/OR SUSPENDED LOAD MAY SWING AND CAUSE PERSONAL INJURY OR PROPERTY DAMAGE.**
- Use only with compatible Rose accessories.
- Verify that all mounting bolts are in place and properly tightened to 150 pound-foot (203 N-m) before each use.

## 6.0 SYSTEMS REQUIREMENTS

The folding davit and mounting base are components of multi-component systems. Without the other necessary components, they serve no useful purpose. The folding davit and mounting base are primarily intended for material handling and as a personnel riding system backed up by a personal fall arrest system. They may also be used in rescue and climbing protection systems. In general, however, they are not intended for restraint and evacuation systems use. In order to clarify the distinctions between these different systems and combinations of systems, they are briefly described below.

### 6.1 SYSTEM TYPES

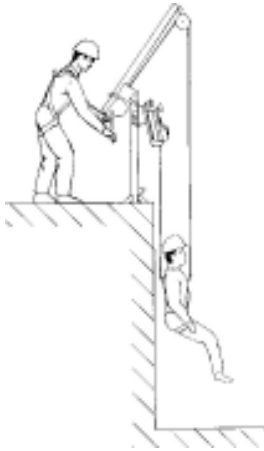
Systems are classified according to their intended purposes. There are six classifications of systems which may be used individually or in combinations. The six basic systems classifications are:

- |                       |               |              |
|-----------------------|---------------|--------------|
| • Personnel-riding    | • Fall Arrest | • Rescue     |
| • Climbing protection | • Restraint   | • Evacuation |

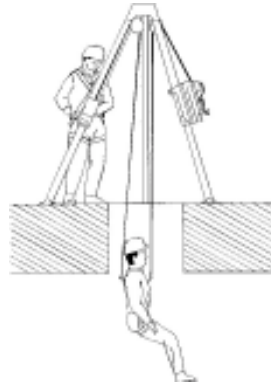
#### 6.1.1 PERSONNEL-RIDING SYSTEMS

A personnel-riding system is an assembly of components and subsystems, including the necessary connectors, used for lifting and lowering a worker to and from a work station which is not accessible by other preferred means, and potentially for positioning the worker while at that work station. Personnel-riding systems are of two general types, namely: (a) the mobile supported aerial platform type (e.g. manually- and self-propelled platforms and vehicle-mounted platforms), and (b) suspended personnel hoisting type (e.g. suspended scaffolds, suspension seats, and suspension harnesses). When working on mobile supported aerial platforms, the user should use a restraint system (see section 6.1.3) anchored to the platform to provide restraint against falling from the platform. When working with the suspended personnel hoisting type of system, the user should use a back-up a fall arrest system of either the self-retracting lanyard type or the fall arrester (rope grab) type. Contact Rose for separate instructions on the associated equipment used in personnel-riding systems. The folding davit is suitable for use in personnel-riding systems.





Folding davit and Mounting base personnel-riding system



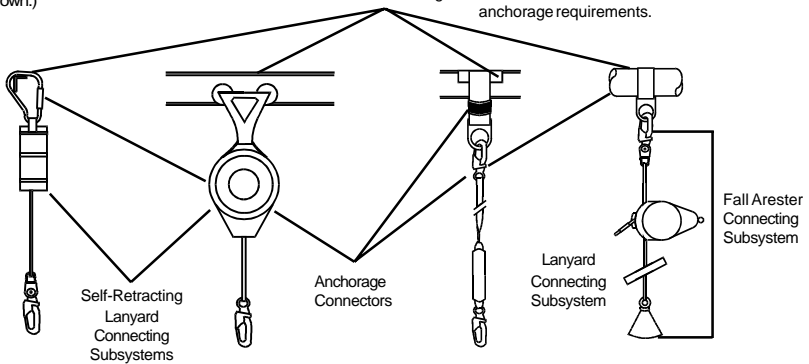
Ropod™ personnel-riding system

6.1.2 FALL ARREST SYSTEMS

A fall arrest system is an assembly of components and subsystems, including the necessary connectors, used to arrest the user in a fall from a working height and suspend the user until rescue can be effected. A fall arrest system must always include a harness and connecting means between the harness and an anchorage or anchorage connector. Such connecting means may consist of a lanyard, energy (shock) absorber, fall arrester (rope grab), lifeline, self-retracting lanyard or suitable combinations of these. The folding davit Dyna-Lock/Dynevac mounting bracket attachment point is a suitable anchorage connector in a fall arrest system.

(Illustrations not to scale. Details not shown.)

Anchorage - See section 6.2.3 and 7.1 for anchorage requirements.



6.1.2.1

Lanyard Connecting Subsystem is the term applied to an assembly, including the necessary connectors, which is comprised of a lanyard and a shock absorber. The lanyard and shock absorber are usually permanently coupled together along with self-locking snaphooks at each end. The subsystem is attached between the fall arrest attachment (back D-ring) of the harness and an anchorage or anchorage connector. The folding davit is not included in lanyard connecting subsystems.

### 6.1.2.2

**Fall Arrester Connecting Subsystem** is the term applied to an assembly, including the necessary connectors, which is comprised of a fall arrester (rope grab) and a vertical lifeline. Sometimes a lanyard or lanyard with integral shock absorber, including the necessary connectors, is connected to the rope grab. The vertical lifeline must have a lifeline tensioner (counterweight), a connector for anchoring it, and may have a shock absorber. The subsystem is attached between the fall arrest attachment (back D-ring) of the harness and an anchorage or anchorage connector. Fall arrester connecting subsystems are sometimes suitable for use in climbing protection systems. See section 6.1.2. Contact Rose for information on shock absorbing lanyards that are suitable for use in fall arrester connecting subsystems. Rose folding davit is not included in fall arrester connecting subsystems.

### 6.1.2.3

**Self-Retracting Lanyard Connecting Subsystem** is the term applied to an assembly, including the necessary connectors, comprised of a self-retracting lanyard only or a self-retracting lanyard and added shock absorber at the point of attachment to the user's harness. The subsystem is attached between the fall arrest attachment (back D-ring) of the harness and an anchorage or anchorage connector. These subsystems are sometimes suitable for use in climbing protection systems. See section 6.1.2. The folding davit is not included in self-retracting lanyard connecting subsystems.

## 6.1.3 RESCUE SYSTEMS

A rescue system is an assembly of components and subsystems, including the necessary connectors, used for moving an incapacitated or isolated person from a hazardous place to a safe place under alert or emergency conditions. An isolated person is one who has no available means of access to a safe place or is physically stranded or trapped. Rescue systems require actions of specially trained rescuers to effect the rescue of the incapacitated or isolated person. The folding davit is suitable for use in rescue systems.

### 6.1.4

**CLIMBING PROTECTION SYSTEMS:** A climbing protection system is an assembly of components and subsystems, including the necessary connectors, used to arrest the user in a fall from a working height and suspend the user until rescue can be effected. Such systems are used for climbing ladders and structures that are designed for climbing. They may either be temporary (portable) or permanent. Temporary climbing protection systems are described in sections 6.1.1.2 and 6.1.1.3. Permanent climbing protection systems are ones of the rigid rail type such as the Rose Dyna-Glide systems. In those systems, a rigid rail is permanently attached to the structure to be climbed. A fall arrester device is attached to and glides on the rail to permit ascent and descent. It quickly locks in case of a fall. The Dyna-Glide fall arrester is attached between the front attachment (chest D-ring) of a Rose Pullover harness and the fall arrester by use of a carabiner. Contact Rose for more information about Dyna-Glide climbing protection systems. The folding davit Dyna-Lock/Dynevac mounting bracket attachment point is a suitable anchorage connector in a temporary climbing protection system. See sections 6.1.7.2 and 6.1.7.3.

### 6.1.5

**RESTRAINT SYSTEMS:** A restraint system is an assembly of components and subsystems, including the necessary connectors, used to:

- (a) stabilize and partially support the user at an elevated work location and allow free use of both hands. This type of restraint system is referred to as a work positioning system or, simply, a positioning system.
- (b) restrict the user's motion so as to prevent reaching a location where a fall hazard exists. This type of system is referred to as a travel restriction system.

A positioning system includes a harness and connecting means between the harness and an anchorage or anchorage connector. Such connecting means usually consists of a positioning lanyard which is connected to both hip D-rings and wraps around or connects to an anchorage or anchorage connector. A positioning system must always be backed up by a fall arrest system. A travel restriction system consists of a harness and a fixed-length or adjustable-length lanyard connected between any one of the harness D-rings and an anchorage or anchorage connector. **The folding davit should not be used for work positioning nor for travel restriction.**

### 6.1.6

**EVACUATION SYSTEMS:** An evacuation system is an assembly of components and subsystems, including the necessary connectors, employed by the user to move, unassisted by others, from a hazardous place to a safe place under alert or emergency conditions. An evacuation system consists of a harness and connecting means between the harness and an anchorage or anchorage connector. Such connecting means may consist of: (a) the Rose Dynescape<sup>®</sup> Automatic Descender, (b) the Rose Dynescape<sup>®</sup> Manual Descender, or (c) the Rose Fallblocc<sup>®</sup> System. See the separate instructions for this equipment. The folding davit is generally not used in evacuation systems.

### 6.1.7

**COMBINATIONS OF SYSTEMS:** Systems for fall arrest, restraint, climbing protection, personnel-riding, rescue and evacuation are often used in combination. For example, positioning type restraint systems must be backed up by a separate and independent fall arrest system. Hands-on training is required to obtain the necessary information and skills needed to work with combinations of systems. Refer to the separate instructions accompanying the several components and subsystems necessary to make up these systems.

#### 6.1.7.1

Folding davit material handling system consists of the folding davit and mounting base with Rose Dyna-Hoist and Rose Split-Mount Pulley. This system is intended to only be used to lift and lower materials.

#### 6.1.7.2

**Folding davit climbing protection and rescue system** consists of the folding davit and mounting base with Rose Dynevac and Rose Dynevac mounting bracket. This system is intended to be used to arrest the user in a fall from a working height and effect a rescue of the user.

#### 6.1.7.3

**Folding davit climbing protection system** consists of the folding davit and mounting base with Rose Dyna-Lock and Rose Dyna-lock mounting bracket. This system is intended to be used to arrest the user in a fall from a working height and suspend the user until rescue can be effected.

#### 6.1.7.4

**Folding davit personnel-riding and back-up fall arrest system** consists of the folding davit and mounting base with Rose Dyna-Hoist and Rose Split-Mount Pulley, Rose Dyna-Lock, and Rose Dyna-Lock Mounting bracket. This system is intended to be used to lift and lower personnel and to arrest the user in a fall from a working height and suspend the user until rescue can be effected.

#### 6.1.7.5

**Folding davit personnel-riding and back-up fall arrest with rescue system** consists of the folding davit and mounting base with Rose Dyna-Hoist and Rose Split-Mount Pulley, Rose Dynevac and Rose Dynevac Mounting bracket. This system is intended to be used to lift and lower personnel and to arrest the user in a fall from a working height and effect a rescue of the user.

## 6.2 COMPATIBILITY OF SYSTEM PARTS

### 6.2.1

**COMPATIBILITY OF COMPONENTS AND SUBSYSTEMS:** Rose folding davit and mounting base are designed to be used with other Rose approved components and connecting subsystems. Use of the folding davit and mounting base 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. Contact Rose Manufacturing Company with any questions regarding compatibility of equipment used with the folding davit and mounting base.

### 6.2.2

**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").

### 6.2.3

**ANCHORAGES AND ANCHORAGE CONNECTORS:** An anchorage is generally a fixed structural member such as a beam, girder, column, floor, or wall. The folding davit and mounting base are an anchorage connector for personnel-riding systems and for personal fall arrest systems. Anchorages and anchorage connectors 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.

## 7.0 PLANNING THE USE OF SYSTEMS

Perform the hazard identification and evaluation described in section 3.0 of these instructions. Then plan the system(s) before starting work. Consider all possible paths of user movement and all factors that could affect the user's safety before, during, and after a fall anywhere along these paths. A qualified person must select the components, materials, anchorage and anchorage connectors to match the system application, the work, workplace hazards, and the environment. Consider the following points when planning the system(s).

### 7.1 ANCHORAGE AND ANCHORAGE CONNECTOR SELECTION

Determine the necessary locations of anchorages to assure that the user will be continuously connected when exposed to hazards of falling. Select anchorages that are stable and have the strength required by section 6.2.3 of these instructions. Carefully select the locations of the anchorages to: (a) reduce possible free fall distance, (b) prevent swing fall hazards, and (c) provide clear space in the potential fall paths to avoid striking an object. Do not select anchorage locations that will require the user to work above them as this will increase the potential free fall and total fall distances. Plan the types of anchorage connectors that will need to be selected and refer to those instructions.

### 7.2 FREE FALL DISTANCE, TOTAL FALL DISTANCE, AND SYSTEM ELONGATION

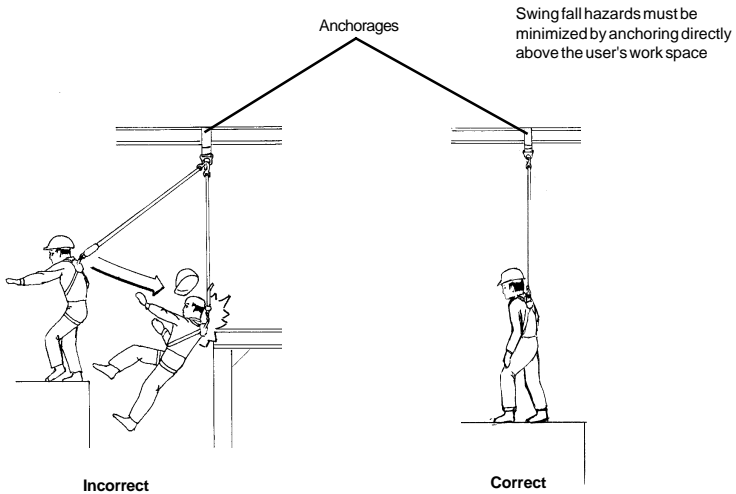
Personal fall arrest systems must be selected and rigged to ensure that potential free fall distances will never exceed 6 ft (1.8 m) as required by OSHA and ANSI Z359.1. [In Canada, free fall distance is limited to 5 ft (1.5 m) by regulation. ANSI A10.14 also restricts free fall distance to 5 ft (1.5 m).] Total fall distance is the sum of free fall distance and deceleration distance. Dynamic elongation of the system (temporary elastic stretch of connecting components and subsystems) must be included in the total fall distance and the user must allow for clearance.

### 7.3 USER MOVEMENTS

Identify all necessary movements of the user and the materials and equipment needed to perform the planned work. Plan for avoidance of the crossing or tangling of connecting subsystems of two or more workers. Anticipate user movements that might introduce hazards of the connecting subsystem passing under, about or between body parts or invite the user to clamp, knot or otherwise prevent the connecting subsystem from functioning properly. Establish controls to prevent these occurrences.

7.4 PENDULUM (SWING) FALLS

Swing falls can occur when the system is not anchored directly above the user. The force of striking an object in a pendular motion can cause serious injury. Always minimize swing falls by working as directly below the anchorage point as possible.



7.5 CLEAR SPACE IN FALL PATH

Make certain that enough clearance is available in all potential fall paths to prevent striking an object. The amount of clearance needed depends upon the type of connecting subsystem used, and the location of the anchorage. Allow at least 40 in (1 m) below the user and within a radius of 6 ft (1.8 m). This allows for some horizontal motion during the fall even if there is no swing fall possible.

7.6 HAZARDS IDENTIFIED IN WORKPLACE ASSESSMENT

All hazards of the type set forth in section 3 of these instructions must be addressed and suitable controls planned and implemented. For example, if work must be performed near unavoidable sharp edges, plan to protect against cutting by use of heavy padding or other means of covering the sharp edge.

7.7 RESCUE AND EVACUATION

The user must have a rescue plan and the means at hand to implement it. The plan must take into account the equipment and special training necessary to effect prompt rescue under all foreseeable conditions. If the rescue be from a confined space, the provisions of OSHA regulation 1910.146 and ANSI Z117.1 must be taken into account. Although a rescue plan and the means to implement it must always be in place, it is a good idea to provide means for evacuation without assistance of others. This will usually reduce the time to get to a safe place and reduce or prevent the risk to rescuers. The folding davit and mounting base are suitable for use in rescue systems but not used in evacuation systems.

7.8 PERSONNEL-RIDING SYSTEM ASSESSMENT

The user must take into account several factors when planning the use of a personnel-riding system, these include but are not limited to the following; Make certain that enough clearance is available around, above and below the folding davit and mounting base to allow user that is operating and user that is suspended by the personnel-riding system to move about unimpeded in the entire range of movement of the folding davit and mounting base and compatible components. The user that is suspended by the personnel-riding system must have a fall arrest system providing personal fall arrest capability. The user that is operating the personnel-riding system must have a restraint system to restrict the user's motion so as to prevent reaching a location where a fall hazard exists. The user that is operating and the user that is suspended by the personnel-riding system must have a means by which to communicate while using the personnel-riding system.

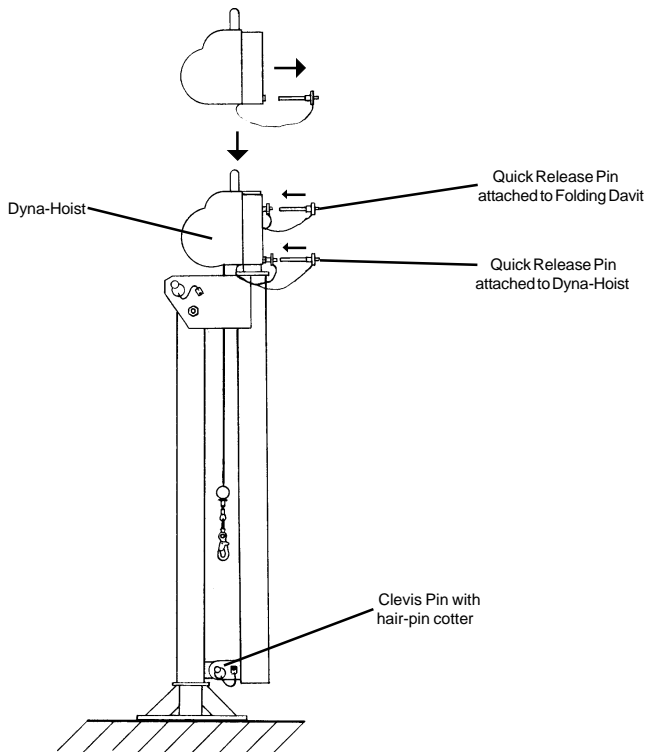
## 8.0 USAGE

### 8.1 FOLDING DAVIT INSPECTION BEFORE EACH USE

Inspect the folding davit and mounting base to verify that it is in serviceable condition. See section 11 for inspection details. Do not use folding davit or mounting base if inspection reveals an unsafe condition.

### 8.2 ATTACHING THE DYNA-HOIST PERSONNEL AND MATERIALS HOIST AND ERECTING THE FOLDING DAVIT

- With the davit in the folded position, remove the quick release pin from the square tube of the davit.
- Insert the snaphook on the side-mount Dyna-Hoist through the opening between the hinged bracket and the upper tube.
- Assemble the Dyna-Hoist onto the square tube, such that the Dyna-Hoist is on the lower side of the tube and the mounting holes are aligned.
- Insert the quick release pin (attached to the Dyna-Hoist), through the holes in the bracket on the Dyna-Hoist, and capture the square tube. Verify that the quick release pin is secure in the Dyna-Hoist.
- Align the hole in the square tube with the slot in the Dyna-Hoist and insert the quick release pin through the bracket, square tube, and into the hole in the Dyna-Hoist. Verify that the quick release pin is secure in the Dyna-Hoist (see Figure 4).
- Extract approximately 5 ft (1.5 m) of cable from the Dyna-Hoist.



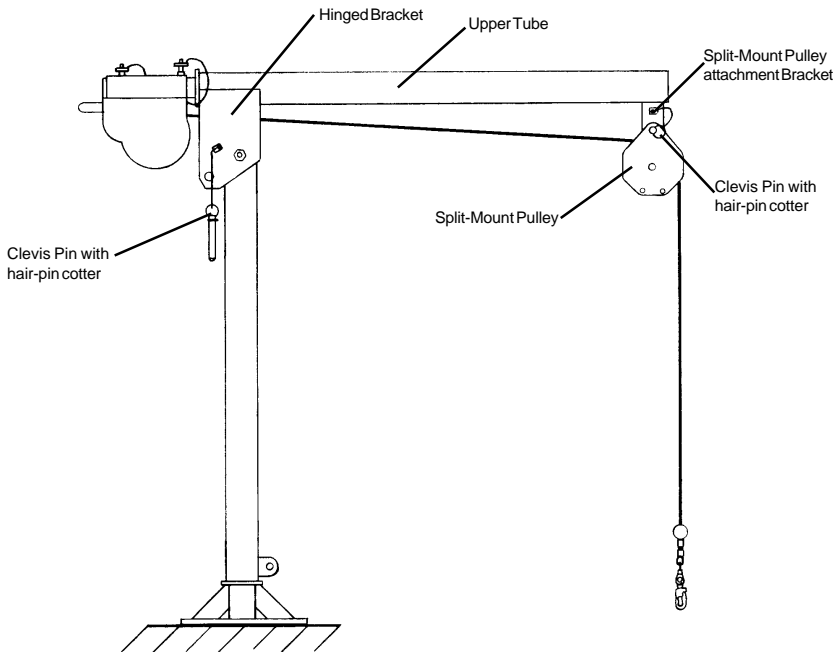
**ATTACHING THE DYNA-HOIST PERSONNEL AND MATERIALS HOIST  
FIGURE 4**

- Remove the clevis pin securing the end opposite the hinge.
- Remove the clevis pin from the hinge end.
- Pivot the upper tube until it is parallel to ground level.

**CAUTION**

***Pivot the folding davit so as not to strike a person or object with the end of the upper tube or pinch fingers at the hinge bracket.***

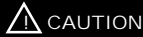
- Attach the Split-Mount Pulley (P/N 506222) to the davit by first inserting cable into the open end of the pulley then attaching the pulley to the pulley attachment bracket of the upper tube with clevis pin, attached to the bracket (see Figure 5).
- Insert the hair-pin cotter through the end of the clevis pin.



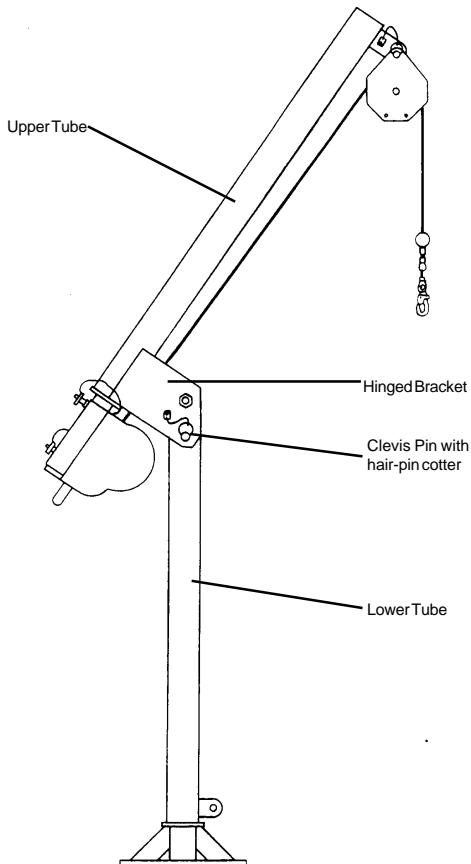
**ATTACHING THE SPLIT-MOUNT PULLEY  
FIGURE 5**

- Remove the hair-pin cotter from the clevis pin in the hinged bracket and remove clevis pin.
- Pivot the upper tube until the holes in the hinge bracket and lower tube align. Insert the clevis pin, attached to the hinge bracket, through the bracket and the lower tube (see Figure 6).
- Insert the hair-pin cotter through the end of the clevis pin.

For further detailed instructions on the proper operation and maintenance of the Dyna-Hoist, see the user instructions which is included with each unit.



***Read the Dyna-Hoist user instructions before attempting to use the hoist beyond this point.***



**ERECTING THE FOLDING DAVIT  
FIGURE 6**



### 8.3 ATTACHING THE DYNEVAC MOUNTING BRACKET AND DYNEVAC TO THE FOLDING DAVIT

The following procedure applies to both of the mounting brackets for 95 ft (30 m) and 50 ft (16 m) Dynevac/Dyna-Lock.

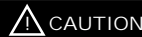
With the davit in the erected position, assemble the Dynevac/Dyna-Lock mounting bracket to the lower tube, such that the cable opening is facing down. Align the holes in the mounting bracket with the holes in the lower tube. Insert the clevis pin, attached to the mounting bracket, through the mounting bracket and lower tube. Insert the hair-pin cotter through the hole in the clevis pin.

Assemble the Dynevac/Dyna-Lock to the mounting bracket by gripping the ball stop and extracting several inches of cable from the Dynevac/Dyna-Lock. Insert the nozzle of the Dynevac/Dyna-Lock into the opening on the mounting bracket. The flange on the Dynevac/Dyna-Lock must be under the rubber bumpers on the opening end of the mounting bracket. Release the cable and let the ball stop rest on the exterior of the mounting bracket opening. Assemble the Dynevac/Dyna-Lock handle over the boss on the mounting bracket and insert the hair-pin cotter, attached to the mounting bracket, through the hole in the boss, capturing the Dynevac/Dyna-Lock handle between the hair-pin cotter and mounting bracket boss (see Figure 7).

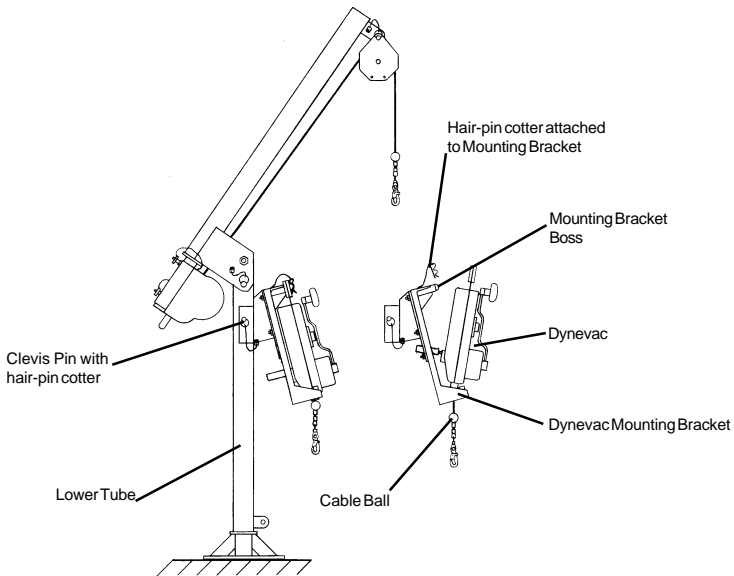


***The Dynevac/Dyna-Lock handle must be captured between the hair-pin cotter and the mounting bracket boss. The ball stop on the cable must be on the exterior of the mounting bracket opening.***

For further detailed instructions on the proper operation and maintenance of the Dynevac/Dyna-Lock, see the user instructions which is included with each unit.



***Read the Dynevac/Dyna-Lock User Instructions before attempting to use the Dynevac/Dyna-Lock beyond this point.***



**ATTACHING DYNEVAC OR DYNA-LOCK AND MOUNTING BRACKET  
FIGURE 7**

## 8.4 OPERATION OF THE FOLDING DAVIT WITH MOUNTING BASE:

### CAUTION

- ***Whenever the hoist is exposed to a potential fall hazard by working near a confined space opening or near the edge of a walking/working surface, the operator must be connected to a suitable anchorage by means of a travel restraint lanyard.***
- ***Verify the hinge bracket is secured to lower tube with clevis-pin and hair-pin cotter before applying load.***
- ***Do not exceed the maximum working load of 310 lbs (240 kg) for personnel (total weight including clothing and tools) or 620 lbs (280 kg) for material.***
- ***Do not attach more than one user to the folding davit at one time.***
- ***Do not attempt to carry personnel and materials at the same time.***
- ***Always maintain a firm grip on the folding davit when lifting or pivoting. Davit may swing and cause personal injury or property damage.***
- ***Always keep hands away from pinch points around load bearing lines.***

### 8.4.1 LOWERING A PERSON INTO A CONFINED SPACE OR OVER THE EDGE OF A WALKING/WORKING SURFACE

One user is required to operate the hoist to raise and lower another user. The user being lowered and the user operating the personnel-riding system must be secured against the hazard of falling before opening the confined space portal or approaching the edge of the walking/working surface.

The user entering the confined space must be attached to both lines of the davit. The front D-ring of the harness must be connected to the Dyna-Hoist for lifting, lowering, and positioning. The back D-ring of the user's harness must be connected to the Dynevac or Dyna-Lock to arrest the user in a fall from a working height.

Position the folding davit over the confined space entry or the edge of the walking/working surface. Visually check the path of descent to be sure no obstructions are present. Lower the user using the Dyna-Hoist at a speed less than the Dynevac or Dyna-Lock self-retracting lanyard locking speed of approximately 4.5 ft/sec (13.7 m/sec). The suspended user should guide the two lines, keeping them separated to prevent twisting.

Do not disconnect from the Dyna-Hoist line when inside a confined space without an alternate provision for emergency retrieval.

### 8.4.2 LIFTING FROM A CONFINED SPACE OR FROM THE EDGE OF A WALKING/WORKING SURFACE

Be sure the user to be lifted is connected to the Dynevac or Dyna-Lock line. To raise the worker from their confined space or back to the edge of the walking/working surface, operate the Dyna-Hoist to lift. Use care to avoid lifting beyond the hoist line travel limit. As in lowering, the suspended user should guide the two lines to prevent twisting.

## 8.5 DISASSEMBLING THE FOLDING DAVIT AFTER USE

To disassemble the components of the davit system, reverse the sequence of steps in the operation instructions, sections 8.2 and 8.3 above. Do not leave the Dyna-Hoist and Dynevac in place for prolonged periods in a corrosive environment. Inspect the system after each use, as described in section 9.0. Stow the equipment in a clean dry area when not in use.

## 9.0 CARE, MAINTENANCE AND STORAGE

User maintenance consists of cleaning and drying the folding davit. All other maintenance or repair/work must be done at the factory or by a person who has been authorized in writing by Rose Manufacturing Co.

### 9.1 CLEANING INSTRUCTIONS

To clean, periodically use a clean damp (not wet) cloth to remove dirt or contamination which may cause corrosion or hamper readability of labels. Wipe off any moisture before returning the device to service. The frequency of cleaning should be determined by inspection and by severity of the environment. In highly corrosive environments cleaning should be done every two or three days. Never use solvents to clean folding davit and mounting base as they may break down the label adhesive. Don't use abrasives to scour the davit or base as they may damage the plating and the labels. To remove oil or grease, use a mild dishwasher detergent on a damp cloth or sponge and follow by repeated swabbing with a clean damp cloth to remove all soap residue. Never immerse the product in water or other liquid.

### 9.2 STORAGE

Store the device in a clean, dry place indoors. Store the product away from heat and steam and never allow it to rest for lengthy periods of time on concrete or ash floors as the lime sulfur and ash can cause corrosion.

## 10.0 MARKINGS AND LABELS

### 10.1

The following labels must be present, legible, and securely attached to the folding davit and mounting base. See section 10.2 for location of labels.

## FOLDING DAVIT

P/N 506613

For personnel use and material handling

### DATE OF MANUFACTURE:

JAN	FEB	MAR	APR	MAY	JUN
JUL	AUG	SEP	OCT	NOV	DEC
00	01	02	03	04	05

Max. Load (personnel): 310 lbs (141 kg)

Max. Load (material): 620 lbs (282 kg)

Material: Steel, zinc plated

Weight (approximate): 47 lbs (21 kg)

### WARNING

READ AND HEED USER INSTRUCTIONS BEFORE INSTALLING OR USING THIS PRODUCT. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR DEATH.

#### INSPECTION:

Inspect the folding davit and mounting base before each use. Inspect for dents, cracks, damaged welds, rust, damaged, altered or missing parts. Follow detailed inspection procedures in User Instructions. Remove from use if any of these conditions are found. Formally inspect by a competent person other than user at least every six (6) months.

#### TO ERECT:

- 1) Verify that the mounting base is free of debris and obstacles which could interfere with the installation of the folding davit.
- 2) Insert the lower tube of the folding davit over the mounting base.
- 3) Remove the clevis pin from the pulley mounting bracket. Remove the clevis pin from the hinge bracket. Pivot the upper tube until the holes in the hinge bracket and lower tube are aligned. Insert the clevis pin, attached to the hinge bracket, through the hinge bracket and lower tube and secure with the hair-pin cotter.
- 4) Assemble companion products such as Dyna-Hoist™ and Dynevac®/Dyna-Lock® and any davit accessories such as sheaves or mounting brackets in accordance with User Instructions.

#### TO STOW:

- 1) Remove companion products such as Dyna-Hoist™ and Dynevac®/Dyna-Lock®. Remove any davit accessories such as sheaves or mounting brackets.
- 2) Remove the clevis pin securing the hinge bracket to the lower tube. Pivot the upper tube until the pulley mounting bracket is aligned with the bracket on the lower tube.
- 3) Insert the clevis pin, attached to the pulley mounting bracket, through the holes in the tabs. Secure clevis pin with hair-pin cotter. Insert the clevis pin, attached to the hinge bracket, through the hinge bracket and secure with the hair-pin cotter.
- 4) Lift the folding davit vertically until davit is clear of the mounting base.
- 5) Stow the folding davit and accessories in a clean, dry place.

Use only accessory equipment recommended by manufacturer. Install in accordance with manufacturer's instructions.

Rose Manufacturing Company  
2250 South Tejon Street  
Englewood, Colorado 80110-1000 U.S.A  
1-800-722-1231  
(303) 922-6246 Fax (303) 934-9960

P/N622635 rev A

## FOLDING DAVIT SPECIFICATION LABEL

 **CAUTION**

**READ AND HEED USER INSTRUCTIONS AND ALL LABELS BEFORE INSTALLING OR USING THIS PRODUCT. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR DEATH.**

- Do not exceed maximum working loads. See User Instructions and folding davit label.
- Install and use under the supervision of a qualified person. **HAVE A RESCUE PLAN.** Users must be trained in fall protection, lifting/lowering, communication, rescue and evacuation procedures.
- Do not use near electrical hazards.
- Do not leave this equipment for long periods in environments where corrosion of metal parts could occur.
- Do not use the pulley attachment bracket for fall arrest.
- Dyna-Hoist and self-retracting lanyard lines **MUST NOT** contact sharp edges or abrasive surfaces.
- Always keep body parts and clothing away from pinch points at hinge bracket.
- During erection of the davit, pivot the davit so as not to strike a person or object with the end of the davit.
- **ALWAYS MAINTAIN A FIRM GRIP ON DAVIT WHEN ROTATING. DAVIT AND/OR SUSPENDED LOAD MAY SWING AND CAUSE PERSONAL INJURY OR PROPERTY DAMAGE.**

P/N 622636

**FOLDING DAVIT CAUTION LABEL**



## FOLDING DAVIT PINCH POINT CAUTION LABEL

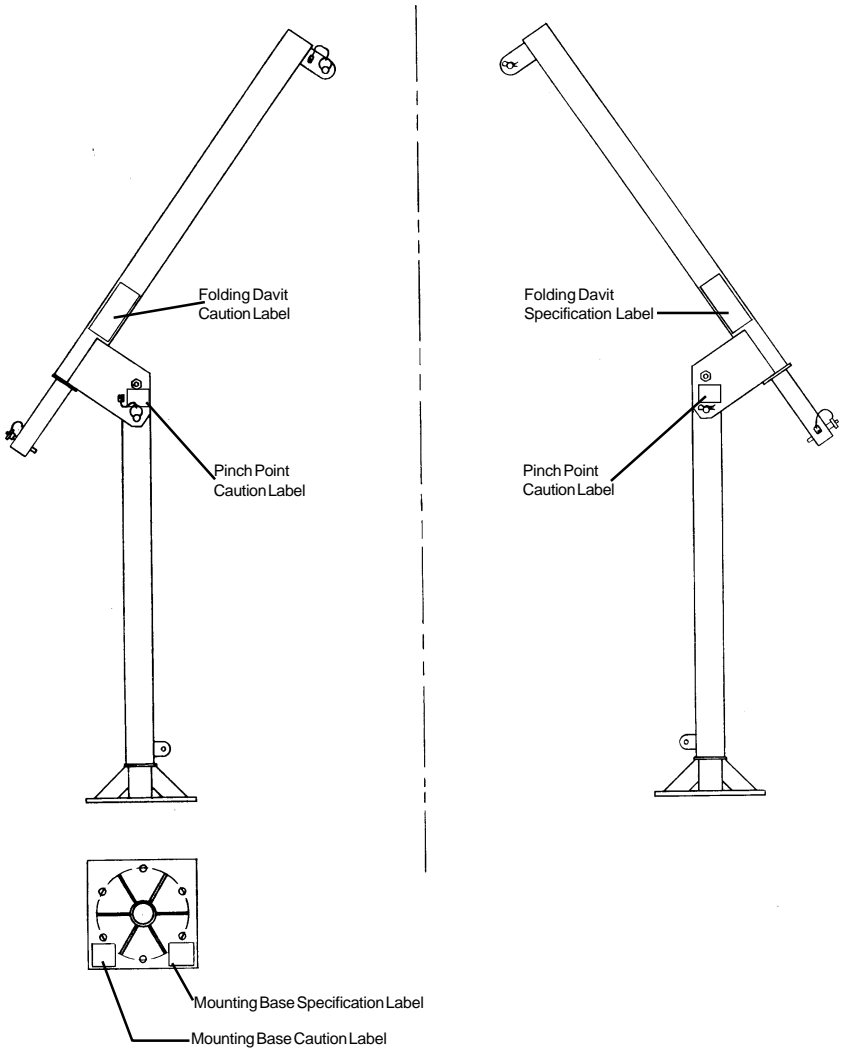
MOUNTING BASE					
P/N 506614					
For Folding Davit					
DATE OF MANUFACTURE:					
JAN	FEB	MAR	APR	MAY	JUN
JUL	AUG	SEP	OCT	NOV	DEC
94	95	96	97	98	99
Max. Working Load (personnel): 310 lbs (141 kg)					
Max. Working Load (material): 620 lbs (282 kg)					
Material: Steel, zinc plated					
Weight (approximate): 32 lbs (36 kg)					
<b>⚠ WARNING</b>					
READ AND HEED USER INSTRUCTIONS BEFORE INSTALLING OR USING THIS PRODUCT. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR DEATH.					
Rose Manufacturing Company 2250 South Tejon Street Englewood, Colorado 80110-1000 U.S.A. 1-800-722-1231 (303) 922-6246 Fax (303) 934-9960 P/N622637 rev A					

## MOUNTING BASE SPECIFICATION LABEL

<b>⚠ CAUTION</b>
<ul style="list-style-type: none"> <li>• Do not exceed maximum working loads.</li> <li>• This device must be mounted on an anchorage with a minimum strength of 5,000 lbs (22 kN). Install under the supervision of a qualified person</li> <li>• Use only with compatible Rose folding davit and accessories.</li> <li>• Do not install near electrical hazards.</li> <li>• Inspect the mounting base before each use. Inspect for dents, cracks, damaged welds, rust, damaged, altered or missing parts. Remove from use if any of these are found. Follow detailed inspection procedures found in User Instructions before and after each use. Formally inspect by a competent person other than the user at least every six (6) months.</li> <li>• Verify that all mounting bolts are in place and properly tightened to 150 ft/lbs (20.7 m/kg) before each use.</li> </ul>
P/N622638 rev A

## MOUNTING BASE CAUTION LABEL

10.2 LOCATION OF LABELS ON THE FOLDING DAVIT WITH MOUNTING BASE



## 11.0 INSPECTION BEFORE EACH USE

### 11.1 INSPECTION FREQUENCY

The folding davit and mounting base 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. See section 12 for Formal Inspection procedures.



***If the folding davit and mounting base has been subjected to fall arrest or impact forces, it must be immediately removed from service and marked as "UNUSABLE" and returned to Rose, or a person authorized in writing by Rose, for inspection and repair.***

### 11.2 PROCEDURE FOR INSPECTION BEFORE EACH USE

Perform the following steps in sequence. If in doubt about any inspection point, consult Rose or a competent person who is qualified to perform Formal Inspection as set forth in section 12.

#### 11.2.1 MOUNTING BASE INSPECTION

Inspect for damaged welds by visually examining each weld area for signs of cracking. Visually examine the entire assembly for deformed, altered, or damaged parts. Inspect labels to verify that they are present and legible. Verify that no obstructions are present on the base tube which could prevent the folding davit from fully seating on the base. Verify that the mounting base is mounted flush against the anchorage and that all bolts are present and tightened to 150 pound-foot (203 N-m).

#### 11.2.2 FOLDING DAVIT INSPECTION

Inspect for damaged welds by visually examining each weld area for signs of cracking or breaks. Inspect the clevis pins for damage by visually examining the entire pin for signs of bending or deformation. Verify that the nut on the travel restraint eyebolt is snug, but not binding the hinge bracket to the lower tube. Inspect the upper and lower davit tube for damage by visually examining the tubes for cracks, bending, or deformation.

#### 11.2.3 16M AND 30M DYNEVAC MOUNTING BRACKETS INSPECTIONS

Inspect for damaged welds by visually examining each weld for signs of cracking or breaking. Inspect for signs of damage due to overloading the mounting bracket by visually examining for cracks, bends or deformation in the carbon steel weldment or aluminum alloy casting. Verify the bolts and nuts connecting the weldment to the casting are present and tight. In the case of a missing bolt and nut, do not replace with a bolt of less than 3/8" diameter and Grade 5 strength. Verify that the hair-pin cotter, which is attached to the bracket boss, is present and inspect for damage by visually examining for signs of bending or deformation.



***Formally inspect all components by a competent person other than the user at intervals of no more than six months. See section 12.0 for procedures.***

If inspection reveals any defect, remove the device from service and label "Unusable" until it is repaired or destroyed. The folding davit and mounting base are not field repairable. Never attempt the field repairs. Return the defective part(s) to Rose Manufacturing Co., or to a person authorized in writing by Rose Manufacturing Co. for repair.



## 12.1 FORMAL INSPECTION FREQUENCY

The folding davit must be formally inspected by a competent person other than the user at intervals of no more than six months. (The qualifications of a competent person are established by OSHA.) If the product is exposed to severe working conditions, more frequent formal inspections may be required. The frequency of inspection by a competent person should be established by the user's organization based on such factors as the nature and severity of workplace conditions, modes of use, and exposure time of the equipment. The competent person should perform a methodical and thorough visual and tactile inspection by following the inspection procedure in section 12.3. The inspection results should be recorded in the Formal Inspection Log and retained for reference. The user should never record this data; however, the user should check it before each use to be sure a Formal Inspection has been performed within the last six months.

## 12.2 CONTROL OF EQUIPMENT

The user's organization should establish and enforce a policy and procedure whereby any folding davit that is found to be defective, damaged, or in need of maintenance be immediately removed from use, marked as "UNUSABLE" and immediately thereafter submitted to custody of the competent person responsible for Formal Inspection. This has the benefits that: 1) defective equipment is secured from further use until proper action is taken; 2) uniform standards are applied for determining whether the equipment is acceptable or not acceptable for further use; 3) uniform methods of cleaning and other maintenance are applied; and 4) there is a central point for evaluation of conditions that may be recurring and require preventive measures such as coordination with the equipment manufacturer, selection of alternate equipment, additional training of equipment users, or changes to the workplace conditions.

## 12.3 FORMAL INSPECTION PROCEDURE

The Formal Inspection Procedure is similar to the user's inspection before each use described in section 11. However, it differs in three important respects, namely: 1) it is performed by a competent person other than the user who is trained and authorized to perform Formal Inspection for the user's organization; 2) it is more detailed and is methodically recorded on a Formal Inspection Log that is kept on file for future reference; and 3) it results in final disposition of the equipment as either "acceptable" (indicated by the formal inspector recording the current month/year in the Formal Inspection Log), or as "not acceptable" followed by destruction of the product, or return it to Rose, or a person authorized in writing by Rose, for repair.

There are three forms that are important to the Formal Inspection Procedure. They are the Formal Inspection Diagram ("DIAGRAM"), the Formal Inspection Log ("LOG"), and the Formal Inspection Checklist and Codes ("CHECKLIST"). These forms relate and refer to each other so it is necessary to understand their purposes and uses before discussing the inspection procedure.

### 12.3.1 DIAGRAM

This is a drawing of the folding davit and mounting base. It has numbered callouts of the parts. The numbers called out in the DIAGRAM correspond to those shown on the column titled "INSP. POINT" (inspection point) on the LOG.

### 12.3.2 LOG

This is the form to be used to record observations made during the Formal Inspection. The Model No., Serial No. and Date Made are recorded by the inspector from the label set. The formal inspector's name and the inspection date are entered by the inspector. The "Disposition" entry is the last entry made on this form after all observations have been recorded. The entry is either "Acceptable" ("PASS") or "Not Acceptable" ("FAIL"). The columns on the LOG are as follows:

**INSP. POINT** - Inspection point. The folding davit or mounting base part designated in the callouts on the DIAGRAM.

**DESCRIPTION** - Name of the folding davit and mounting base inspection point. There are three broad categories of inspection points, namely, metallic parts, and plastic parts. There are sub-categories under these two main categories.

**QTY/R** - Quantity per folding davit. This is the number of inspection points on each folding davit which must be inspected.

**COND.** - Condition. The condition of the folding davit part is indicated here by entry of the appropriate Condition Code shown on the CHECKLIST (e.g. W1, S4, M0, etc.). Alternatively, the inspector may simply enter "FAIL" if a defective condition exists and make no entry if no defect exists.

**OVERALL ASSESS.** - Overall assessment. The inspector's evaluation of the overall acceptability or non-acceptability of the part category (i.e. metallic, plastic). The appropriate Overall Assessment Code defined on the CHECKLIST is entered here (e.g. WA, SN, MA, PN). Alternatively, the inspector may simply enter "FAIL" if a defective condition exists and make no entry if no defect exists.

**COMMENTS** - Indicate pertinent inspector observations here.

### 12.3.3 CHECKLIST AND CODES

This is a table which categorizes the different types of folding davit or mounting base parts into broad categories (e.g. metallic, plastic). For each of these categories that are applicable to a specific product, the formal inspector checks the folding davit or mounting base parts for each of the associated conditions (e.g. cracks, deformation, wear, etc.). The codes for the detected conditions are entered in the Condition column on the LOG (e.g. W1, S4, M0, etc.). Overall assessment codes are given, along with the criteria for assigning them, so the inspector can decide if the folding davit or mounting base is acceptable or not acceptable for further use (e.g. WA, SN, MA, PN). Alternatively, instead of using these codes, the inspector may simply enter "FAIL" if a defective condition exists and make no entry if no defect exists.

### 12.3.4 FORMAL INSPECTION PROCEDURAL STEPS

- Step 1:** Record on the LOG the Model No., Serial No. and Date Made information shown on the product label set. Record the inspector's name and inspection date.
- Step 2:** Arrange the folding davit and mounting base so the parts to be inspected are readily visible.
- Step 3:** Starting with the metallic category of parts shown on the LOG, inspect each part (inspection point) one at a time. Refer to the DIAGRAM for identification of each inspection point. Each part must be inspected for the possible presence of the conditions shown on the CHECKLIST. Enter in the Condition column on the LOG the proper Condition Code (listed on the CHECKLIST) or "FAIL" if a defect exists. If there is any question whether the product condition has materially changed since the last Formal Inspection, retrieve and review the prior Formal Inspection records for the specific product.
- Step 4:** Repeat Steps 2 and 3 for the plastic categories of part types.
- Step 5:** Determine whether the part (inspection point) is acceptable or not acceptable. If an inspection point has a defective condition, enter in the Overall Assessment column of the LOG the proper code taken from the CHECKLIST (e.g. WN, SN, MN, PN) or simply "FAIL."
- Step 6:** Determine disposition of the folding davit and mounting base. If in step 5 it has been determined that the folding davit and mounting base is not acceptable, enter "N" or "FAIL" in the Disposition space on the LOG. In addition, a notation should be made in this space as to whether the folding davit or mounting base are to be destroyed, returned to manufacturer/distributor, etc.
- Step 7:** If in step 5 it has been determined that the folding davit or mounting base are acceptable for further use, enter "A" or "PASS" in the Disposition space on the LOG.
- Step 8:** File the LOG for future reference.

12.4 FORMAL INSPECTION CHECKLIST AND CODES

TYPE OF PART INSPECTED	CONDITION	COND. CODE	OVERALL ASSESSMENT CODE	LEGEND
METALLIC	Deformed/fractured Corroded/deep pits Missing/deep pits Heat exposure Chemical exposure Burrs/sharp edges Cuts/deep nicks Malfunction Other No visible change	M1 M2 M3 M4 M5 M6 M7 M8 M9 M0	MA - (Metallic acceptable)  MN - (Metallic not acceptable)	<b>Disposition</b> A - (Acceptable) N - (Not Acceptable) Enter "A" (or "Pass") Enter "N" (or "Fail") in Disposition blank on Formal Inspection Log.
PLASTIC	Cut/broken/deformed Wear damage Missing/loose Burns/heat exposure Chemical exposure Other No visible change	P1 P2 P3 P4 P5 P6 P0	PA - (Plastic acceptable)  PN - (Plastic not acceptable)	<b>Criteria for disposition of "N" (Not Acceptable):</b>  If there is one or more Overall Assessment Code of "N" type (e.g. WN,SN,MN,PN).

## 12.5 FORMAL INSPECTION LOG

## 12.5.1 FOLDING DAVIT

Model No.: 506613 Inspector: J.W.Doe  
 Serial No.: D01001K Inspection Date: 12/15/94  
 Date Made: 5/94 Disposition: N - See Item 6 Return to Rose

INSP POINT	DESCRIPTION	QTY/ ACS	COND. (a)	OVERALL ASSESS.(a)	COMMENTS
<b>METALLIC PARTS</b>					
2	Lower Tube	1	M0	MA	
3	Clevis Pin	1	M0	MA	
4	Bolt with Nut	1	M8	MN	
5	Hinge Bracket	1	M0	MA	
6	Pulley Bracket	1	M1	MA	Weld cracked
7	Clevis Pin	1	M0	MA	
8	Upper Tube	1	M0	MA	
9	Quick Release Pin	1	M0	MA	
<b>PLASTIC PARTS</b>					
10	Label	4	P0	PA	

## 12.5.2 MOUNTING BRACET

Model No.: 506614 Inspector: J.W.Doe  
 Serial No.: D01001I Inspection Date: 12/15/94  
 Date Made: 5/94 Disposition: N - See Item 1 Return to Rose

INSP POINT	DESCRIPTION	QTY/ ACS	COND. (a)	OVERALL ASSESS.(a)	COMMENTS
<b>METALLIC PARTS</b>					
1	Mounting Base	1	M2	MA	Severe corrosion
11	Thrust Washer	1	M0	MA	
12	Mounting Bolt Torque	6	M0	MA	
<b>PLASTIC PARTS</b>					
10	Label	1	P0	PA	

(a) Optional simplified PASS/FAIL inspection format: Whenever an acceptable condition is found, the entry in the COND. and OVERALL ASSESS. columns may be left blank. Whenever a defective condition is found, enter "FAIL." The inspection may end upon detection of a single defective condition.

(b) Blank copies of this LOG, with associated CHECKLIST and DIAGRAM, are available from Rose Manufacturing Company. Call Toll Free (800) 722-1231.

**12.5 FORMAL INSPECTION LOG FOR DAVIT AND MOUNTING BASE**

**12.5.1 FOLDING DAVIT**

Model No.: \_\_\_\_\_ Inspector: \_\_\_\_\_  
 Serial No.: \_\_\_\_\_ Inspection Date: \_\_\_\_\_  
 Date Made: \_\_\_\_\_ Disposition: \_\_\_\_\_

INSP POINT	DESCRIPTION	QTY/ ACS	COND. (a)	OVERALL ASSESS.(a)	COMMENTS
<b>METALLIC PARTS</b>					
2	Lower Tube	1			
3	Clevis Pin	1			
4	Bolt with Nut	1			
5	Hinge Bracket	1			
6	Pulley Bracket	1			
7	Clevis Pin	1			
8	Upper Tube	1			
9	Quick Release Pin	1			
<b>PLASTIC PARTS</b>					
10	Label	4			

**12.5.2 MOUNTING BRACET**

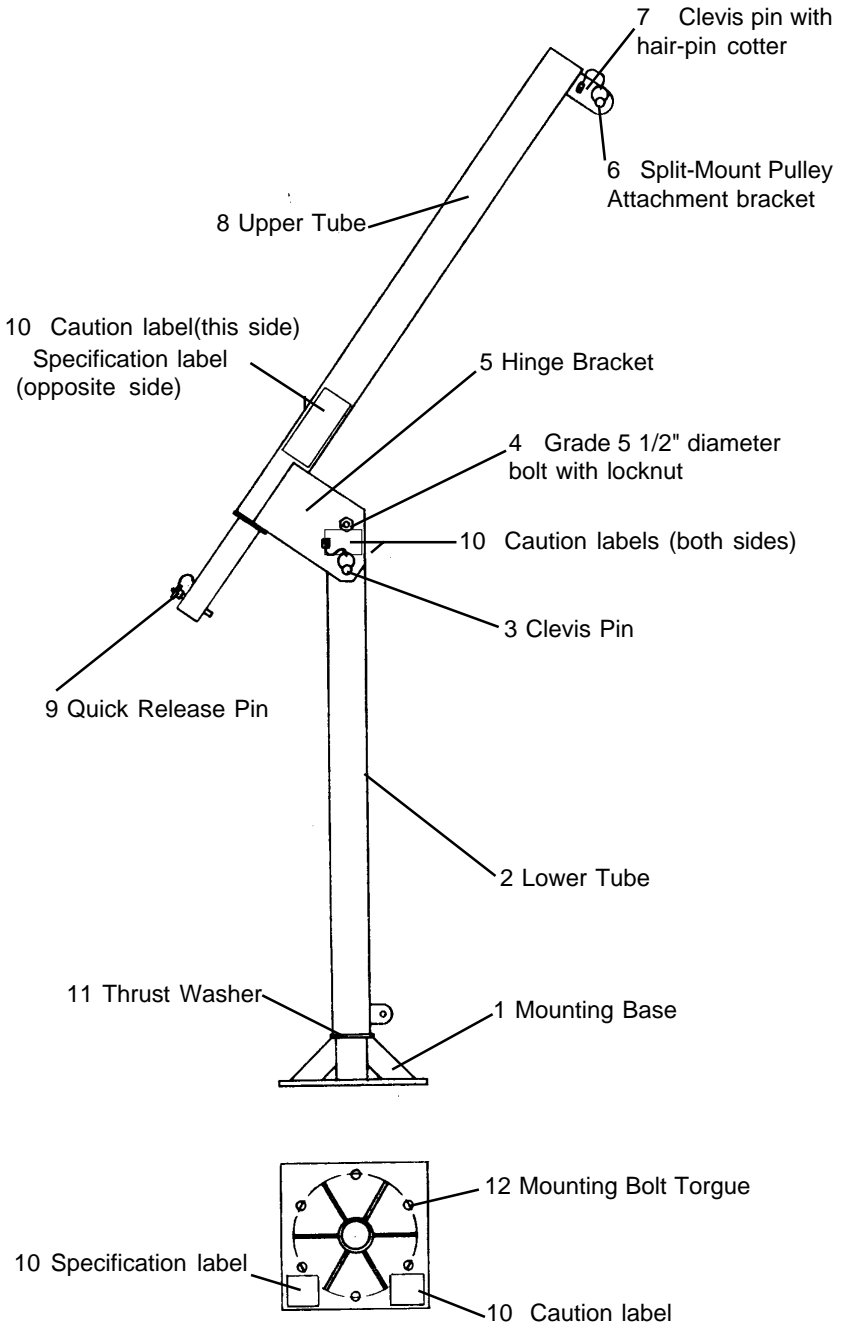
Model No.: \_\_\_\_\_ Inspector: \_\_\_\_\_  
 Serial No.: \_\_\_\_\_ Inspection Date: \_\_\_\_\_  
 Date Made: \_\_\_\_\_ Disposition: \_\_\_\_\_

INSP POINT	DESCRIPTION	QTY/ ACS	COND. (a)	OVERALL ASSESS.(a)	COMMENTS
<b>METALLIC PARTS</b>					
1	Mounting Base	1			
11	Thrust Washer	1			
12	Mounting Bolt Torque	6			
<b>PLASTIC PARTS</b>					
10	Label	1			

(a) Optional simplified PASS/FAIL inspection format: Whenever an acceptable condition is found, the entry in the COND. and OVERALL ASSESS. columns may be left blank. Whenever a defective condition is found, enter "FAIL." The inspection may end upon detection of a single defective condition.

(b) Blank copies of this LOG, with associated CHECKLIST and DIAGRAM, are available from Rose Manufacturing Company. Call Toll Free (800) 722-1231.

12.6 FORMAL INSPECTION DIAGRAM



**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 FITNESS FOR A PARTICULAR PURPOSE. For additional information please contact the Customer Service Department at 1-800-MSA-2222 (1-800-672-2222).*

**Note:** While uses and performance capabilities are described, under no circumstances shall the product be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only the user instructions contain the complete and detailed information concerning proper use and care of the product.

**Offices and Representatives in  
principal cities worldwide.**

**In U.S. Call the Customer  
Service Center at  
(800) 672-2222**

**Or Fax at  
(800) 967-0398**

**To Reach MSA International, Call  
(412) 967-3451**

**ROSE MANUFACTURING COMPANY  
2250 S. Tejon St.  
Englewood, CO 80110-1000**

**MSA CORPORATE  
HEADQUARTERS  
P.O. BOX 426  
Pittsburgh, PA 15230**

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