

USER INSTRUCTIONS

ROSE RAILRIDER™

ANCHORAGE CONNECTOR

MODEL 506634

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 RAILRIDER ANCHORAGE CONNECTOR MODEL 506634

1.1 SPECIFICATIONS - ROSE RAILRIDER ANCHORAGE CONNECTOR

- Rose Railrider Anchorage Connector model 506634 meets ANSI Z359.1 and ANSI A10.14 standards and applicable OSHA regulations. These instructions, and markings borne by the Railrider, fulfill the instruction and marking requirements of those standards and regulations.
- The Railrider has a minimum breaking strength of 5000 lbf (22.2 kN).
- The Railrider is constructed of high tensile alloy steel and zinc plated.
- The Railrider is designed for the attachment of one personal fall arrest system.
- When used as part of a personal fall arrest system, fall arresting forces must not exceed 1,800 lbf (8 kN).
- Capacity is 310 lb (140 kg) including weight of the user plus clothing, tools and other user-borne objects.
- The Railrider is compatible with rails from 85 lbs/yd (42.3 kg/m) minimum to 136 lbs/yd (67.6 kg/m) maximum and 2.50 in (6.4 cm) minimum head width.
- The Railrider can be disconnected from the rail in less than 30 seconds.
- The Railrider has a thermal operating range from -45 deg F (-43 deg C) to 180 deg F (82 deg C).
- The Railrider has a net weight of 6.1 lbs (2.8 kg).
- The Railrider measures 10.25 in (26.0 cm) height x 6 in (15.2 cm) width x 7 in (17.2 cm) length, nominal measures.
- Use only with compatible lanyards equipped with self-locking snaphooks or carabiners. See section 8.3.

CAUTION

The Rose Railrider is designed for personnel use only. It is not intended for use in material handling.

2.0 TRAINING

It is the responsibility of the purchaser of the Rose Railrider Anchorage Connector to assure that Railrider Anchorage Connector 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 Railrider Anchorage Connector; (3) how to determine and acceptably limit free fall distance, total fall distance, and maximum arresting force; (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 Railrider Anchorage Connector 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

⚠ CAUTION

- Do not use the Rose Railrider Anchorage Connector unless a qualified person has inspected the workplace and determined that identified hazards can neither be eliminated nor exposures to them prevented.
- Do not use at any time there is powered equipment in use on the rail anchorage.
- Do not use on open rail ends or at rail ends that are not securely anchored.

Prior to selecting 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 | • Chemicals | • Abrasive surfaces | • Climatic factors |
| • Sparks | • Electrical hazards | • Moving equipment | • Weather factors |
| • Flames | • Environmental contaminants | • Moving materials | • Unstable/uneven surfaces |
| • Heat-producing operations | • Sharp objects | • Unguarded openings | • Slippery surfaces |
| • Confined space hazards | • Open rail ends | • Excessively worn rails | |

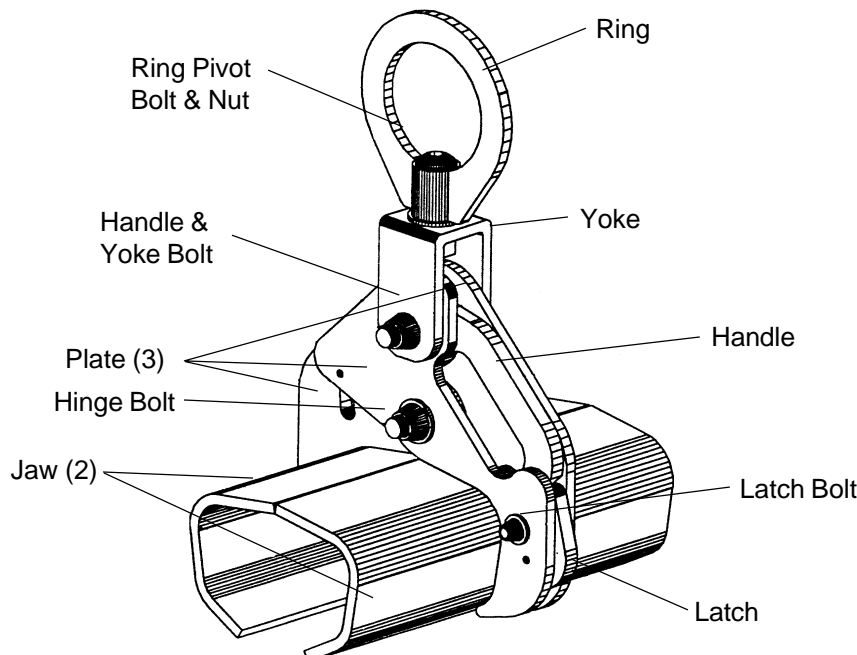
Foreseeable changes in any of these conditions, taken individually or collectively, must be identified. The materials and construction of the equipment must be considered in the selection process such that these workplace conditions are suitably addressed and responded to. The equipment must match the 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. An assembly connecting a harness to an anchorage must be selected which will satisfactorily limit total fall distance and allow for dynamic elongation and activation distance of the assembly.

4.0 DESCRIPTION OF ROSE RAILRIDER ANCHORAGE CONNECTOR

The Rose Railrider is a temporary, mobile anchorage connector. It is a component designed specifically for coupling a single personal fall arrest system to a rail anchorage. The Railrider consists of two hinged jaws secured permanently by a tamper-proof bolt. Above the jaws is mounted a swivel ring for attaching the users personal fall arrest lanyard. The design allows quick and simple installation and removal for most common rail sections. The device moves smoothly along the length of the rail during normal movements and grips securely when under load.

4.1 RAILRIDER ANCHORAGE CONNECTOR COMPONENTS



- 4.1.1 JAWS (2):** The jaws distribute loads to the rail and allow ease of movement in guiding the anchorage connector along the direction of movement.

- 4.1.2 PLATES (3):** The plates connect the two jaws about a central pivot point. The plates also mount the attachment ring assembly.
- 4.1.3 HINGE BOLT:** The hinge bolt secures the plates and jaws together as a single unit. The bolt is permanently installed at the factory and cannot be removed.
- 4.1.4 HANDLE:** The integral handle opens and closes the jaws in a rotating cam action.
- 4.1.5 LATCH:** The latch locks the handle in the closed position, under spring tension, and releases the handle when the latch is depressed.
- 4.1.6 LATCH BOLT:** This bolt secures the latch to the plates. The bolt is permanently installed at the factory and cannot be removed.
- 4.1.7 YOKE:** The yoke connects the attachment ring to the plates and allows the ring to pivot from side to side across the plates.
- 4.1.8 HANDLE AND YOKE BOLT:** This bolt passes through the yoke, the handle and the plates securing these parts together as a single unit. The bolt is permanently installed at the factory and cannot be removed.
- 4.1.9 RING:** The ring pivots about the yoke and provides a means for attaching a compatible Rose self-locking snaphook. The ring is the Railrider attachment element for fall arrest or travel restriction.
- 4.1.10 RING PIVOT BOLT AND NUT:** This bolt and nut secure the ring to the yoke. The nut is welded at the factory and can not be removed.

5.0 RAILRIDER ANCHORAGE CONNECTOR SELECTION AND APPLICATIONS

- 5.1 PURPOSE OF ROSE RAILRIDER ANCHORAGE CONNECTOR:** The Railrider Anchorage Connector is primarily a component of a personal fall arrest system, serving as an anchorage connector. It may also be used for work positioning, travel restriction, rescue, retrieval and evacuation, depending on the associated system components used together with the Railrider Anchorage Connector. Use of the Railrider Anchorage Connector 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 a Railrider Anchorage Connector 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 Railrider Anchorage Connector 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. In Canada, refer to provincial and federal regulations.
- 5.2 USAGE LIMITATIONS:** The following applications limitations must be considered and planned for before using the Rose Railrider Anchorage Connector:
 - 5.2.1 PHYSICAL LIMITATIONS:** The Railrider Anchorage Connector is designed for use by one person with a total weight no greater than 310 lbs (140 kg), including clothing, tools, and other user-borne objects.
 - 5.2.2 CHEMICAL HAZARDS:** Acidic, alkaline, or other environments with harsh substances may damage the hardware elements of the Railrider Anchorage Connector. If working in a chemically aggressive environment, consult Rose Manufacturing Company to determine that the Railrider Anchorage Connector material is suitable for your specific conditions. When working in the presence of chemicals, more frequent inspection of the Railrider Anchorage Connector is required.
 - 5.2.3 CORROSION:** Do not expose the Railrider Anchorage Connector 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 Railrider Anchorage Connector is required. See sections 9, 11 and 12 for cleaning and inspection details.
 - 5.2.4 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 ft (3 m)} from electrical hazards.
 - 5.2.5 MULTIPLE RAILRIDERS:** Multiple Railriders may be used on the same rail, not to exceed 3 per 20 ft (6.1 m) length of rail anchorage. Care should taken to avoid crossing lanyards or to obstruct another worker's fall path.
 - 5.2.6 OTHER EQUIPMENT:** Do not use the Railrider when powered equipment is in use on the rail anchorage. Remove the device and do not use until the rail is clear.
 - 5.2.7 IMPACT FORCES:** Any Railrider Anchorage Connector which has been subjected to the forces of arresting a fall must be immediately removed from service and marked as "UNUSABLE" until inspected by a competent person, repaired or destroyed.

6.0 SYSTEMS REQUIREMENTS

The Railrider Anchorage Connector is one component of multi-component systems. Without the other necessary components, the Railrider Anchorage Connector serves no useful purpose.

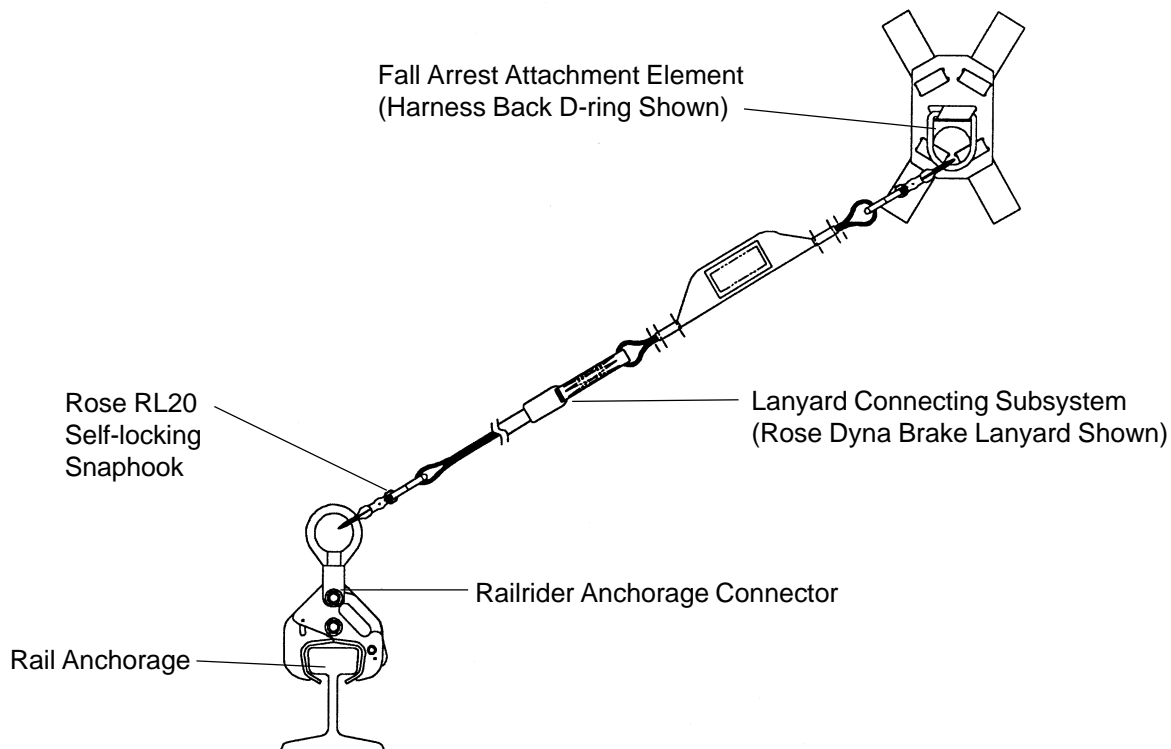
6.1 SYSTEM TYPES: Systems are classified according to their intended purposes. There are six classifications of systems which may be used individually or in combinations. The six basic systems classifications are:

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

6.1.1 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.

6.1.1.1 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 Rose Railrider Anchorage Connector is compatible for use with Rose fall arrest lanyard connecting subsystems.**

6.1.1.2 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. **Rose Railrider Anchorage Connectors are suitable for use in certain fall arrester connecting subsystems. See separate instructions.**



6.1.1.3 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 Rose Railrider Anchorage Connector is not suitable for use with self-retracting lanyard connecting subsystems.**

6.1.2 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 Rose Railrider Anchorage Connector may be suitable for use in temporary climbing protection systems. See separate instructions.**

6.1.3 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 Rose Railrider Anchorage Connector described by these instructions is suitable for use in restraint systems.**

6.1.4 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). A harness must be used in both of these different systems; however, the way it is used will differ. 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 must employ a fall arrest system of either the self-retracting lanyard type or the fall arrester (rope grab) type. It is permissible to use a harness as a suspension harness for making access to the work station if the access time is of very short duration and the use of a suspension seat is not possible. **The Rose Railrider Anchorage Connector is not suitable for use in personnel-riding systems.** Do not use a harness for fully suspended work positioning. Contact Rose for separate instructions on the associated equipment used in personnel-riding systems.

6.1.5 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. When rescuing a person who is wearing a harness, it is generally best to connect the rescue line to the chest D-ring. Alternatively, it is acceptable (but less desirable) to connect the rescue line to both of the shoulder D-rings using a "Y" retrieval lanyard. If the harness being used by the person being rescued has neither a chest D-ring nor shoulder D-rings, the back D-ring may be used as a last resort to connect the rescue line. Rose strongly recommends that the user select a harness with a chest D-ring to provide for rescue. **The Rose Railrider Anchorage Connector may be used in certain rescue applications.**

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™ Automatic Descender, (b) the Rose Dynescape™ Manual Descender, or (c) the Rose Fallbloc™ System. See the separate instructions for this equipment. **The Rose Railrider Anchorage Connector is not suitable for use 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.

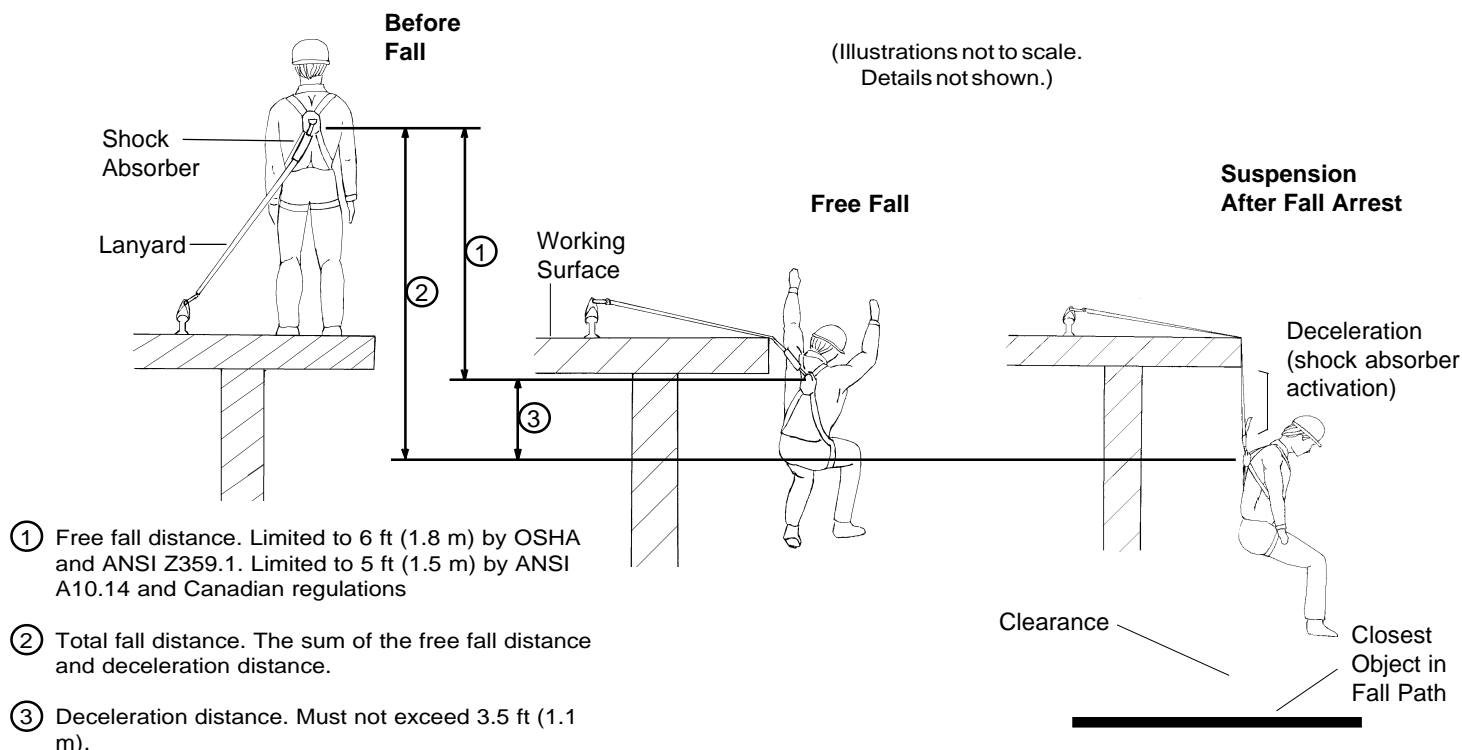
6.2 COMPATIBILITY OF SYSTEM PARTS

- 6.2.1 COMPATIBILITY OF COMPONENTS AND SUBSYSTEMS:** Rose Railrider Anchorage Connectors are designed to be used with Rose approved components and connecting subsystems. Use of the Railrider Anchorage Connector 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 Railrider Anchorage Connectors, the maximum fall arrest force must not exceed 1,800 lbf (8 kN). Contact Rose Manufacturing Company with any questions regarding compatibility of equipment used with the Rose Railrider Anchorage Connector.
- 6.2.2 COMPATIBILITY OF CONNECTORS:** Connectors, such as D-rings, forged 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 carabiner and the forged ring on the lanyard are compatible. Verify also that the connecting snaphook and harness D-ring are compatible. Use only self-closing, self-locking snaphooks and carabiners (as defined and required by ANSI Z359.1).
- 6.2.3 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.

7.0 PLANNING THE USE OF SYSTEMS

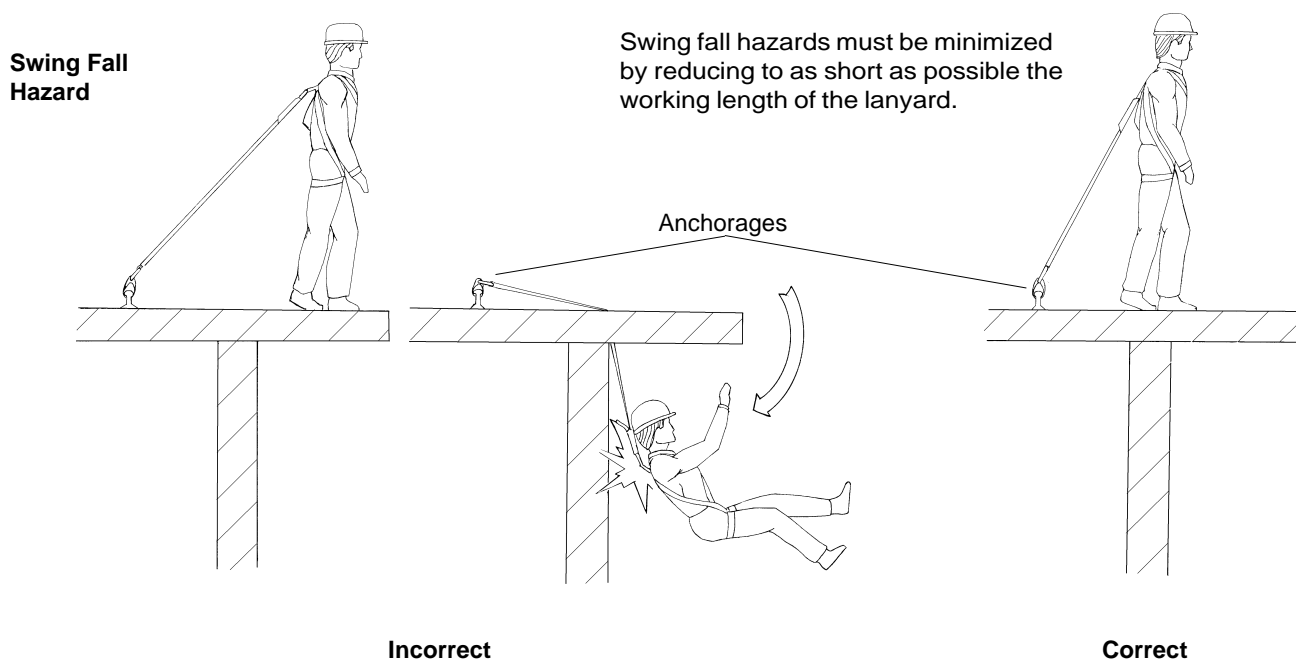
Perform the hazard identification and evaluation described in section 3 of these instructions. Then plan the system(s) before starting work. Consider all possible paths of user movement and all factors that could affect the user's safety before, during, and after a fall anywhere along these paths. A 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. Plan the types of anchorage connectors that will need to be selected and refer to these 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 not 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).] See separate instructions for connecting subsystems to determine the deceleration distance and dynamic elongation which must be allowed for in the space of potential fall paths. 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 added to total fall distance and clearance allowed.



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 close to 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. Consult the manufacturer's instructions for the particular connecting subsystem or component for clearance needed.
- 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. 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.

8.0 USAGE

- 8.1 RAILRIDER ANCHORAGE CONNECTOR INSPECTION BEFORE EACH USE:** Inspect the Railrider Anchorage Connector to verify that it is in serviceable condition. See section 11 for inspection details. Do not use the Railrider Anchorage Connector if inspection reveals an unsafe condition.
- 8.2 INSTALLATION OF THE RAILRIDER ANCHORAGE CONNECTOR**
- 8.2.1 ANCHORAGE PREPARATION:** Begin by inspecting the rail to verify that the width of the head of the rail is at least 2.5 in (6.4 cm). The rail must be sufficiently anchored to provide the strength necessary to withstand the forces of arresting a fall. Do not use the Railrider if these conditions are not met.

⚠ CAUTION

When installing or removing the Railrider Anchorage Connector, limit exposure to fall hazards. Whenever possible, connect the personal fall arrest system to the rail anchorage before entering the fall hazard zone and disconnect only after leaving the fall hazard zone.

8.2.2 INSTALLATION:

Step 1: Open jaws by depressing latch **(a)** and pulling on handle **(b)** (jaws are spring loaded and will automatically open when handle is opened).



Step 1 (a)



Step 1 (b)

Step 2: Place Railrider on head of rail.



Step 2

⚠ CAUTION

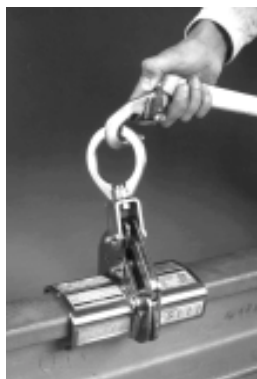
Verify adequate head width along entire length of rail comprising the work area. Stay well back from an exposed rail end.

Step 3: Close jaws around head of rail by rotating handle until it clicks and latch locks. Pull outward on handle to ensure it is locked in the closed position, it should not move.



Step 3

Step 4: Connect compatible Rose lanyard to swivel ring of Railrider.



Step 4

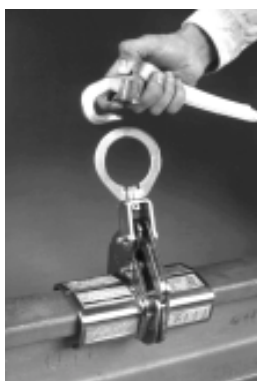
Step 5: Inspect the installation. Verify that all components are present and correctly mounted. The jaws must slide freely along the rail.



Step 5

8.2.3 REMOVAL: Before attempting removal of the Railrider Anchorage Connector, disconnect all loads and attachment elements from the swivel ring. Return the Railrider Anchorage Connector to the appropriate person in the user's organization for cleaning, inspection and storage.

Step 1: Disconnect lanyard (a), depress latch and rotate handle to open jaws to remove from rail (b).



Step 1 (a)



Step 1 (b)

Step 2: Close handle before storing. Store in closed and locked position.



Step 2

When a splice in the rail is encountered, step to the inside of the rail and remove the Railrider as described in section 8.2.3. Reconnect on the other side of the splice following the installation sequence described in section 8.2.2 before proceeding.

Note: Railrider will not fit on rails with splice bars, angle bars or braces.

⚠ CAUTION

Do not leave the Railrider Anchorage Connector unattended on the rail. Refer to sections 9, 11 and 12 for care and inspection details.

8.3 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 or snaphook and the mating connector causes the carabiner's or snaphook's gate or keeper to accidentally open and release. Rollout occurs when a carabiner or snaphook 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. Always follow the manufacturer's instructions supplied with each system component. See separate instructions for compatible Rose Dyna Brake lanyards and work positioning lanyards. Select lanyards made from 5/8 in (16 mm) dia. rope, 1 in (25 mm) strap or wire rope.

- 8.4 USER MOVEMENTS:** When moving along the rail, pull the Railrider into position by tugging on the lanyard.




9.0 CARE, MAINTENANCE AND STORAGE

- 9.1 CLEANING INSTRUCTIONS:** Clean the Railrider Anchorage Connector 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 Railrider Anchorage Connector. Questions concerning Railrider Anchorage Connector conditions and cleaning should be directed to Rose Manufacturing Company.
- 9.2 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.
- 9.3 STORAGE:** Store the Railrider in the closed and locked position to prevent possible damage to the locking mechanism. Store the Railrider Anchorage Connector 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.

10.0 MARKINGS AND LABELS

- 10.1** The following labels must be present, legible and securely attached to the Railrider Anchorage Connector. See section 4 for location of labels.

ID Label

	Rose Railrider™	Made in U.S.A.
	Model No.: 506634	U.S. Patent Pending
Mat'l: Steel, Zinc plated		
Capacity: 310 lbs (140 kg), 1 person incl. clothing, tools and other user-borne objects.		
Proof Tested: 3600 lbf (16.0 kN)		
Meets: ANSI Z359.1, ANSI A10.14, applicable OSHA regulations.		
Minimum Breaking Strength: 5,000 lbf (22.2 kN) in direction of applied force.		
Rose Manufacturing Company, 2250 S. Tejon St., Englewood, CO 80110-1000, 1-800-722-1231		
		P/N 622903

Caution Label

	CAUTION
READ AND HEED ALL INSTRUCTIONS, LABELS AND WARNINGS FOR THIS PRODUCT AND FOR PRODUCTS INTENDED FOR USE WITH IT. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR DEATH.	
<ul style="list-style-type: none"> Use only on 85-136 lbs/yd (42.3-67.6 kg/m) rail sections. Rail anchorage must be capable of supporting 5000 lbf (22.2 kN). Do not install device when the possibility exists that it may interfere with equipment running on the same rail. Do not reuse if subjected to fall arrest forces. Remove from use, label "UNUSABLE" until reinspected by a competent person, repaired, or destroyed. 	
	P/N 622904

Installation Label


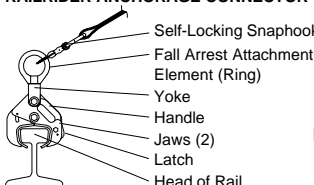

<p>INSTALLATION - Step 1: Depress latch to unlock. Step 2: Rotate handle counterclockwise until jaws are open. Step 3: Mount on head of rail. Step 4: Close jaws by rotating handle clockwise until latch locks handle in closed position.</p> <p>REMOVAL - Step 1: Depress latch to unlock. Step 2: Rotate handle counterclockwise until jaws are open. Step 3: Remove Railrider from head of rail.</p>
 CAUTION CHECK TO VERIFY THAT RAILRIDER IS CLOSED AND LOCKED ON RAILHEAD BEFORE USE.
P/N 622905

Diagram Label

RAILRIDER ANCHORAGE CONNECTOR COMPONENTS -	
 <ul style="list-style-type: none"> Self-Locking Snaphook Fall Arrest Attachment Element (Ring) Yoke Handle Jaws (2) Latch Head of Rail 	 <p>Do Not Use on "Head-Free" Rail</p>
	P/N 622906

Inspection Label

<p>INSPECTION - User must inspect before each use. The Railrider must be formally inspected by a competent person other than the user at intervals of no more than six months. See separate instructions for inspection details. Check for broken or missing parts, cracks, permanent deformation & corrosion. Ring must swivel and yoke pivot freely. If product is defective, label "UNUSABLE" until reinspected by a competent person, repaired, or destroyed.</p>
P/N 623021

Date of Manufacture Label

DATE OF MANUFACTURE -				
YEAR	1996	1997	1998	1999
MONTH	JAN	FEB	MAR	APR
	MAY	JUN	JUL	AUG
	SEP	OCT	NOV	DEC
P/N 623022				

11.0 INSPECTION BEFORE EACH USE

- 11.1 INSPECTION FREQUENCY:** The Railrider Anchorage Connector 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.

CAUTION

If the Railrider Anchorage Connector has been subjected to fall arrest or impact forces, it must be immediately removed from service and marked as "UNUSABLE" until inspected by a competent person, repaired or destroyed.

11.2 INSPECTION STEPS

Step 1: Inspect the Railrider Anchorage Connector labels to verify that they are present and legible. See section 4 for location of labels for each model. See section 10 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.

Step 2: Inspect the jaws, plates, hinge bolt, handle, latch, latch bolt, yoke, handle & yoke bolt, ring, ring pivot bolt & nut, and welded joints between the plates and jaws for deformation, fractures, cracks, corrosion, deep pitting, sharp edges, cuts, deep nicks, and evidence of excessive heat or chemical exposures. Verify that the handle closes and locks. The latch must restrain the handle under spring tension.

Step 3: Inspect the plastic labels for their presence and legibility.

Step 4: Inspect each component and subsystem of the complete system in accordance with the associated manufacturer's instructions. See section 6 for a description of the make-up of the different types of subsystems and systems.

- 11.3 CORRECTIVE ACTION:** When inspection in accordance with section 11.2 reveals signs of inadequate maintenance, the Railrider Anchorage Connector must be immediately removed from service and marked as "UNUSABLE" until destroyed or subjected to corrective maintenance by the user's organization in accordance with section 9. Defects, damage, excessive wear, malfunction, and aging are generally not repairable. If detected, immediately remove the Railrider Anchorage Connector from use and mark it as "UNUSABLE" until destroyed. For final disposition, submit the Railrider Anchorage Connector 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.

CAUTION

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

12.0 FORMAL INSPECTION

- 12.1 FORMAL INSPECTION FREQUENCY:** The Railrider Anchorage Connector 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.
- 12.2 CONTROL OF EQUIPMENT:** The user's organization should establish and enforce a policy and procedure whereby any Railrider Anchorage Connector 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" or as "not acceptable" followed by destruction of the product.

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 set of line drawings of the Railrider Anchorage Connector. Each 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 Railrider Anchorage Connector part designated in the callouts on the DIAGRAM.

DESCRIPTION - Name of the Railrider Anchorage Connector inspection point.

QTY/R - Quantity per Railrider Anchorage Connector. The quantity of each Railrider Anchorage Connector inspection point that must be inspected.

COND. - Condition. The condition of the Railrider Anchorage Connector part is indicated here by entry of the appropriate Condition Code shown on the CHECKLIST (e.g. M0, P2, 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 (e.g. webbing, stitching, metallic, plastic). The appropriate Overall Assessment Code defined on the CHECKLIST is entered here (e.g. MA, PN, etc.). 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 Railrider Anchorage Connector parts. For each of these categories that are applicable to a specific product, the formal inspector checks the Railrider Anchorage Connector parts for each of the associated conditions (e.g. deformation, corrosion, etc.). The codes for the detected conditions are entered in the Condition column on the LOG (e.g. M1, P0, etc.). Overall assessment codes are given, along with the criteria for assigning them, so the inspector can decide if the Railrider Anchorage Connector is acceptable or not acceptable for further use (e.g. MA, MN, PA, 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 Railrider Anchorage Connector so the parts to be inspected are readily visible.

Step 3: Starting with the 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: 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 or simply "FAIL."

Step 5: Determine disposition of the Railrider Anchorage Connector. If in step 4 it has been determined that the Railrider Anchorage Connector 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 Railrider Anchorage Connector is to be destroyed, returned to manufacturer/distributor, etc.

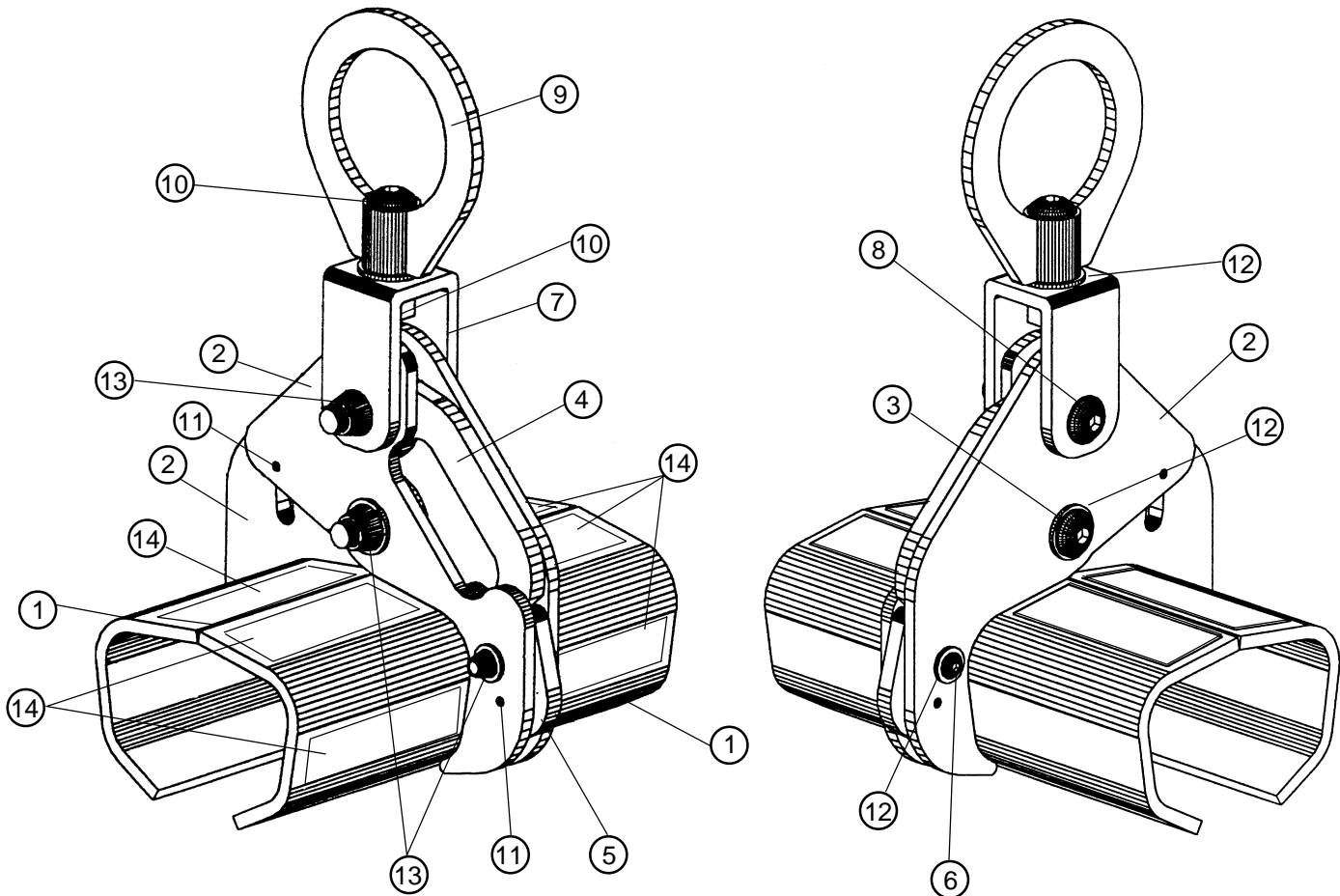
Step 6: If in step 4 it has been determined that the Railrider Anchorage Connector is acceptable for further use, enter "A" or "PASS" in the Disposition space on the LOG.

Step 7: 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	M1	MA - (Metallic acceptable) MN - (Metallic not acceptable)	Disposition: A - (Acceptable) N - (Not acceptable) Enter "A" (or "PASS") or "N" (or "FAIL") in Disposition blank on Formal Inspection Log.
	Corroded/deep pits	M2		
	Missing/loose	M3		
	Heat exposure	M4		
	Chemical exposure	M5		
	Burrs/sharp edges	M6		
	Cuts/deep nicks	M7		
	Malfunction	M8		
	Other	M9		
	No visible change	M0		
Plastic	Cut/broken/deformed	P1	PA - (Plastic acceptable) PN - (Plastic not acceptable)	Criteria for disposition of "N" (Not acceptable): If there is one or more Overall Assessment Code of "N" type (e.g. WN, SN, MN, PN).
	Wear damage	P2		
	Missing/loose	P3		
	Burns/heat exposure	P4		
	Chemical exposure	P5		
	Other	P6		
	No visible change	P0		

12.5 FORMAL INSPECTION DIAGRAM



12.6 FORMAL INSPECTION LOG FOR ROSE RAILRIDER ANCHORAGE CONNECTOR

Model No.: 506634 Inspector: J. W. Doe
 Serial No.: 012345 Inspection Date: 5/4/96
 Date Made: 1/96 Disposition: N - See item 1, Destroy Railrider Anchorage Connector.

INSP. POINT	DESCRIPTION	QTY/ R	COND. (a)	OVERALL ASSESS.(a)	COMMENTS
METALLIC PARTS					
1	Jaw	2	<i>MI</i>	<i>MN</i>	<i>Jaw is deformed, has experienced load</i>
2	Plate	3	<i>MO</i>	<i>MA</i>	
3	Hinge Bolt	1	<i>MO</i>	<i>MA</i>	
4	Handle	1	<i>MO</i>	<i>MA</i>	
5	Latch	1	<i>MO</i>	<i>MA</i>	
6	Latch Bolt	1	<i>MO</i>	<i>MA</i>	
7	Yoke	1	<i>MO</i>	<i>MA</i>	
8	Handle & Yoke Bolt	1	<i>MO</i>	<i>MA</i>	
9	Ring	1	<i>MO</i>	<i>MA</i>	
10	Ring Pivot Bolt & Nut	1	<i>MO</i>	<i>MA</i>	
11	Rivet	2	<i>MO</i>	<i>MA</i>	
12	Washer	5	<i>MO</i>	<i>MA</i>	
13	Tamper-proof Nut	3	<i>MO</i>	<i>MA</i>	
PLASTIC PARTS					
14	Labels	6	<i>PO</i>	<i>PA</i>	

- (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.

LIMITED WARRANTY

New products of Rose Manufacturing Company ("Rose") are warranted against factory defects in materials and workmanship for a period of one (1) year from date of installation or first use by the owner, provided that this period does not exceed two (2) years from date of Rose shipment. Upon notice in writing, Rose will repair or replace defective items. Rose reserves the right to have any product which is claimed to be defective returned freight prepaid to its plant for inspection before making a repair or replacement. Warranty does not cover product damage resulting from abuse, misuse, improper maintenance, damages in transit or damages beyond the control of Rose. This warranty applies only to the original purchaser and is the only warranty applicable to Rose products and is in lieu of all other warranties expressed or implied. Factory service performed on any Rose product is warranted for a period of 90 days against defects in service workmanship and new parts incorporated at time of said service. Factory service warranty does not extend to parts not replaced with new parts at time of factory service. THIS WARRANTY, AND THE LIMITS OF LIABILITY CONTAINED HEREIN, ARE IN LIEU OF ALL OTHER WARRANTS AND LIABILITIES EXPRESSED OR IMPLIED. THE SELLER WARRANTS THE MERCHANTABILITY OR FITNESS OF ITS PRODUCTS IN MEETING THE APPLICABLE OSHA STANDARD RELATED TO ITS PRODUCT. THE BUYER IS RESPONSIBLE FOR ADVISING THE SELLER OF COMPLIANCE WITH LOCAL, MUNICIPAL, OR STATE CODES OTHER THAN OSHA. THE SELLER RESERVES THE RIGHT TO MAKE PRODUCT DESIGN CHANGES WITHOUT NOTIFYING THE BUYER.

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