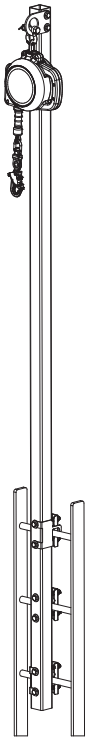
FALL SAFE®

USER INSTRUCTIONS FOR
VERTICAL FIXED LADDER DAVIT

Model # 6518G & 6518S



SureWerx®

FALL SAFE®
Ph. 1-800-323-7402

Canada labels
SureWerx, 49 Schooner St.
Coquitlam, BC V3K 0B3

USA labels
SureWerx USA Inc.
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IMPORTANT INSTRUCTIONS!

These instructions must be kept on file and available for the users reference at **all** times. The users must read and full understand these instructions or have the instructions explained in detail before using this equipment. **Failure to observe these instructions could result in serious injury or death.**

Prior to use, all workers must be trained in the proper use of all systems and equipment.

A Training and Instruction review should be repeated at regular intervals.

A rescue plan must be prepared; the workers must be trained in its use, and rescue equipment must be on hand prior to any use of this Vertical Fixed Ladder Davit system.

Any questions regarding these instructions should be directed to:

Manufacturer's Name and Address

Fall Safe®
Canada labels
SureWerx, 49 Schooner St.
Coquitlam, BC V3K 0B3

USA labels
SureWerx USA Inc.
Elgin, IL USA 60123

IMPORTANT OSHA REGULATIONS COVERING THE USE OF FALL ARREST ANCHORAGE SYSTEMS

OSHA 1926.502 (d)(15):

Anchorages used for attachment of personal fall arrest equipment shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000-lb (22 kN) per employee attached, or shall be designed, installed, and used as follows:

(d)(15)(i):

as part of a complete personal fall arrest system which maintains a safety factor of at least two; and

(d)(15)(ii):

under the supervision of a qualified person.

OSHA 1926.502 (d)(16)(iii):

Personal fall arrest systems shall be rigged such that an employee can neither free-fall more than 6-ft. nor contact any lower surface.

OSHA 1926.502 (d)(21):

Personal fall arrest systems shall be inspected prior to each use for wear, damage and other deterioration, and defective components shall be removed from service.

OSHA 1926.502 (d)(19):

Personal fall arrest systems and components subjected to impact loading shall be immediately removed from service and shall not be used again for employee protection until inspected and determined by a competent person to be undamaged and suitable for reuse.

IMPORTANT OSHA REGULATIONS COVERING THE DESIGN OF FIXED METAL LADDERS

OSHA 1910.28(b)(9):

Fixed ladders (that extend more than 24 feet (7.3 m) above a lower level).

OSHA 1910.28(b)(9)(i):

For fixed ladders that extend more than 24 feet (7.3 m) above a lower level, the employer must ensure:

OSHA 1910.28(b)(9)(i)(A):

Existing fixed ladders. Each fixed ladder installed before November 19, 2018 is equipped with a personal fall arrest system, ladder safety system, cage, or well;

OSHA 1910.28(b)(9)(i)(B):

New fixed ladders. Each fixed ladder installed on and after November 19, 2018, is equipped with a personal fall arrest system or a ladder safety system;

OSHA 1910.28(b)(9)(i)(C):

Replacement. When a fixed ladder, cage, or well, or any portion of a section thereof, is replaced, a personal fall arrest system or ladder safety system is installed in at least that section of the fixed ladder, cage, or well where the replacement is located; and

OSHA 1910.28(b)(9)(i)(D):

Final deadline. On and after November 18, 2036, all fixed ladders are equipped with a personal fall arrest system or a ladder safety system.

OSHA 1910.28(b)(9)(ii):

When a one-section fixed ladder is equipped with a personal fall protection or a ladder safety system or a fixed ladder is equipped with a personal fall arrest or ladder safety system on more than one section, the employer must ensure:

OSHA 1910.28(b)(9)(ii)(A):

The personal fall arrest system or ladder safety system provides protection throughout the entire vertical distance of the ladder, including all ladder sections; and

OSHA 1910.28(b)(9)(ii)(B):

The ladder has rest platforms provided at maximum intervals of 150 feet (45.7 m).

OSHA 1910.28(b)(9)(iii):

The employer must ensure ladder sections having a cage or well:

OSHA 1910.28(b)(9)(iii)(A):

Are offset from adjacent sections; and

OSHA 1910.28(b)(9)(iii)(B):

Have landing platforms provided at maximum intervals of 50 feet (15.2 m).

1910.28(b)(9)(iv):

The employer may use a cage or well in combination with a personal fall arrest system or ladder safety system provided that the cage or well does not interfere with the operation of the system.

SYSTEM DESCRIPTION

The Vertical Fixed Ladder Davit is one component of a personal fall arrest system that is designed to anchor a self-retracting lifeline (SRL) that a single worker can use to climb or descend a fixed metal ladder. The Fixed Ladder Davit uses adjustable rung clamps to attach the Davit to any OSHA standard ladder. Once installed, an SRL with a Maximum Arrest Force (MAF) of 1800-lb. must be attached to the head assembly of the Stanchion providing fall protection for a single individual. NOTE: Only one 6518G or 6518S Fixed Ladder Davit can be attached to any one ladder; connecting more than one Fixed Ladder Davit to a ladder at a time could exceed the rated strength of the ladder.

This Davit is one component of a personal fall arrest system. The system is used in conjunction with a full-body harness for the worker and a self-retracting lanyard (SRL) with 1800-lb. Maximum Arrest Force (MAF) using double-action single-locking snap hooks to attach to the dorsal D-ring of the harness. Any attachments to the Fixed Ladder Davit must transfer fall arrest forces to the body through the dorsal d-ring of the full body harness only. Harness side and chest d-rings are not allowable connection points.

- **Capacity: One user with a combined weight (clothing, tools, etc.) of no more than 310-lb**
- **The Vertical Fixed Ladder Davit has a Minimum Breaking Strength of 3,600-lb.**
- **The Vertical Fixed Ladder Davit meets the anchorage requirement of OSHA for a 2:1 safety factor with a 1,800-lb Maximum Arrest Force (MAF)**

ANCHORAGE POINTS

The Fixed Ladder Davit is designed to be attached to an OSHA compliant fixed ladder capable of taking the intended load of 3,600-lb at SRL Anchor Ring. These ladders are metal consisting of rungs at least ¾-in. in diameter, a minimum of 16-in. wide, and be uniformly spaced no more than 12-in. vertically (per OSHA 1910.28). The ladder must be vertical +/- 5° and affixed to an appropriate structure capable of supporting the ladder, Davit and the loads it was designed to carry. If there are questions concerning the suitability of a ladder for anchoring a Fixed Ladder Davit to, please contact Fall Safe at 303-424-8650 prior to use.

MATERIALS OF CONSTRUCTION

6518G Galvanized Steel Fixed Ladder Davit

- Fixed Ladder Davit: Galvanized Steel
- Rung Clamps and hanger hook brackets: ArmorGalv Steel
- Bolts, washers and nuts: Stainless Steel

6518S Stainless Steel Fixed Ladder Davit

- Fixed Ladder Davit: Stainless Steel
- Rung Clamps and hanger hook brackets: Stainless Steel
- Bolts, washers and nuts: Stainless Steel

VERTICAL FIXED LADDER DAVIT COMPONENTS

The Vertical Fixed Ladder Davit consists of the following standard approved and compatible components:

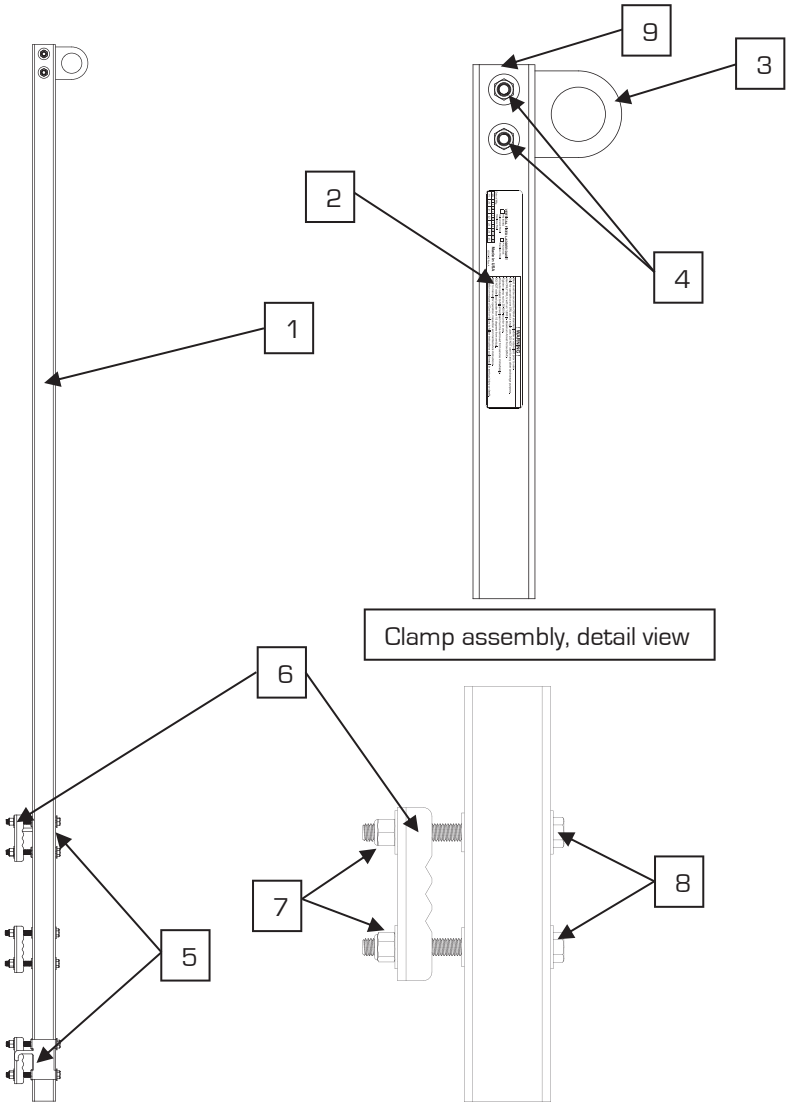


Fig. 1 Components of the Vertical Fixed Ladder Davit

1. Ladder Tube, 1 ea.
2. Label, 1 ea.
3. SRL Anchor Ring, 1 each
4. Anchor Ring Mounting Bolts, Flat Washers & Nylock Nut, 2 ea.
5. Hanger Hook Bracket, 2 ea.
6. Rung Clamp, 3 ea.
7. Flat Washer, Nylock Nut, 6 ea.
8. Davit Mounting Bolt, Flat Washers, Jam Nut, 6 ea.
9. Tube Cap, 1 ea.

PERSONAL FALL ARREST EQUIPMENT USED WITH THE VERTICAL FIXED LADDER DAVIT

Care should be used in selecting harnesses for use with the Vertical Fixed Ladder Davit. Harnesses with sewn down back pads can limit as much as 1 ft. of back pad slippage during fall arrest, giving additional clearance for safety. If the system will be used where a worker could encounter a head first free-fall, a non-secured back pad can slide down the webbing to the small of the back, allowing the worker to fall out of the harness through the top by allowing the harness straps to slip over the shoulders. For this reason, we recommend the use of full body, crossover or pullover type harness with sewn down or slip resistant back pads for all installations.

INSTALLATION LAYOUT CONSIDERATIONS

The Vertical Fixed Ladder Davit is used to provide fall protection while climbing or descending ladders. The height of the Davit is a fixed 84" from the top rung of the ladder (see figure 2). **NOTE:** Once at the new work level, provisions must be made for appropriate fall protection. **DO NOT** exceed 15° work zone from vertical while user is attached to Davit.

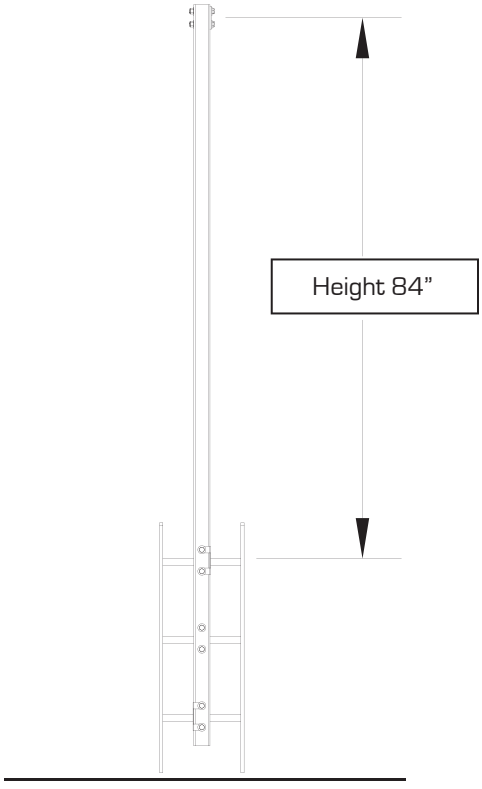


Figure 2

INSTALLATION

NOTE: Installation of the Vertical Fixed Ladder Davit should be done under the supervision of a Competent Person. Approved fall protection MUST be worn at all times during installation of the Davit. Connection to the Vertical Fixed Ladder Davit as an anchorage point for fall protection is not permitted until full installation has been completed and the Vertical Fixed Ladder Davit has been inspected and certified for use. **NOTE:** Only one 6518G or 6518S Vertical Fixed Ladder Davit can be attached to any one ladder; connecting more than one Vertical Fixed Ladder Davit to a ladder at a time could exceed the rated strength of the ladder.

VERTICAL FIXED LADDER DAVIT INSTALLATION PROCEDURES

To Install the Vertical Fixed Ladder Davit

1. Remove the 3 ea. rung clamps from the Stanchion Receptacle by removing the 6 sets of nuts and washers, and the 3 rung clamps from the 6 mounting bolts fastened to the Davit tube. (See Fig. 1 for parts identification).

2. Lift the Vertical Fixed Ladder Davit into place on the front side of the ladder, using the hanger hook brackets located at the top and bottom rung mounting points, to secure the Davit to the rung. The hanger hook brackets will position the Vertical Fixed Ladder Davit so that there is one bolt above the rung and one bolt below the rung for each of the 3 pairs of bolts. (see Fig. 3) NOTE: The hanger hook brackets are to aid installation only, they are not intended to take the load of fall arrest. NOTE: The rung clamps must be connected to 3 rungs; it cannot be used if connected to less than 3 rungs. The exposed ends of the bolts should be pointing towards the back of the ladder.

3. Place one of the Rung Clamps onto one pair of bolts to capture a rung. Secure in place with a flat washer, and a nylock nut. Tighten just enough to keep clamp from falling off. Repeat with the other 2 rung clamps.

4. Adjust the Vertical Fixed Ladder Davit position to center it into the middle of the ladder rungs (see Fig. 4). **NOTE:** In certain applications where ladder exit space is limited, the ladder can be offset to one side of the ladder. Since this offset mounting imparts a small amount of swing fall, care must be taken to ensure the offset placement does not put users at risk of hitting obstacles in the event of a swing fall. Once placed, raise Vertical Fixed Davit until ladder rung becomes captured in one of the v-shaped cuts in the rung clamp (see Fig. 5). **NOTE:** It is preferred that the rungs be captured in the center v-cuts of the rung clamps, but it is not required. Because the spacing of rungs is often variable, not all 3 rungs will be in the same v-cut of the 3 clamps, try and raise or lower the stanchion receptacle and adjust the rung clamps until all three rungs become positioned into one of the v-cuts.

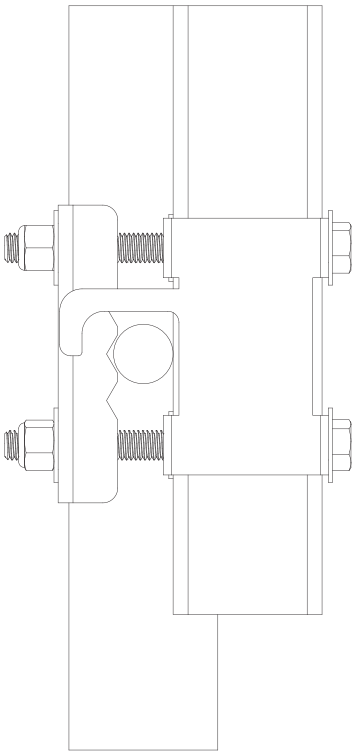


Figure 3

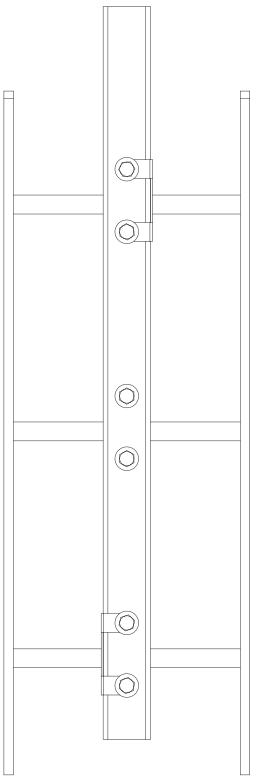


Figure 4

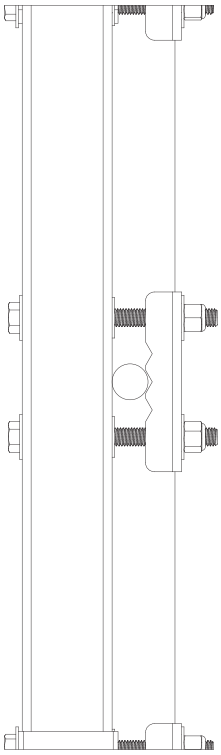


Figure 5

5. Tighten the nylock nuts onto the stud bolts after verifying that both the flat washer and lock washer are inserted under the nut, and that the stanchion is vertically centered on the ladder. Nuts should be tightened to 25- to 30-ft-lb. NOTE: Once torqued, the rung clamp will appear slightly bowed but not flattened or distorted; this is normal. The slight bowing of the clamp once torqued allows the rung clamp to better grip the rung.

Connecting an SRL to the Vertical Fixed Ladder Davit

6. Any SRL with a maximum arrest force of 1800-lb. or less may be connected to the Vertical Fixed Ladder Davit using either a steel carabiner (part number 3062-36 or equivalent) or a ½-in or 5/8-in. bow shackle (part number 6602 or 6066 or equivalent). To connect the SRL using a carabiner, pass the carabiner through the handle (or connection point) of the SRL and lift the SRL upward to the SRL anchor ring. While holding the carabiner gate open, insert the carabiner into the ring opening. Allow the gate to close and lock (see Fig 6). NOTE: If a carabiner is used, the gate MUST close and lock once positioned into the SRL anchor ring. To connect the SRL using a bow shackle, connect the ½ or 5/8-in. bow shackle to the handle or connection point of the SRL. Lift and align the bolt hole loops of the bow shackle with the SRL anchor ring opening and insert bow shackle bolt. Secure in place with the nut and tighten, lock the nut in place with the safety rue pin. (see Fig. 7)

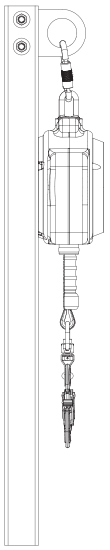


Figure 6

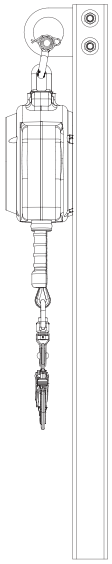


Figure 7

7. Check all fasteners for tightness and perform a function test/initial inspection of the SRL prior to certification of the Vertical Fixed Ladder Davit for use.

8. Removal is the opposite of installation and must only be undertaken when no one is connected to the SRL. **CAUTION:** The SRL Must be removed from the Stanchion Davit before the Stanchion is removed from the ladder. Failure to remove the SRL from the Vertical Fixed Ladder Davit before removing it from the ladder causes it to be extremely top heavy and unstable when removing it from the ladder, and could seriously injure individuals should it fall.

TRAINING

It is the responsibility of the employer to train all workers prior to using this system (per OSHA 1926.503 (a)(1)). The employer shall provide a training program for each employee who might be exposed to fall hazards. The program shall enable each employee to recognize the hazards of falling and shall train each employee in the procedures to be followed in order to minimize these hazards.

The employer shall assure that, as necessary, each employee has been trained by a competent person qualified in the following areas:

a. OSHA regulations governing the use of ladders and personal fall protection systems.
b. Ability to recognize potential fall and workplace hazards.
c. Method of inspection of safety equipment.
d. Rescue procedures.
e. Installation and removal techniques.

PLANNING FOR RESCUE

Prior to system use, a rescue plan must be prepared, the workers must be trained in its use, and the rescue equipment must be on hand to implement it in case of a fall.

Typical rescue plans include (but are not limited to) the following items:

1. List of equipment that must be readily accessible in the event of an emergency and the names of those workers certified to use or operate that equipment.
2. Emergency contact phone numbers (ambulance, hospital, fire department...) and a means to contact them (cell phone, emergency radio).
3. List of employees on the site, and the specific tasks they will perform to effect the rescue.

Qualified Persons trained in fall protection planning and implementation should only undertake the design and installation of personal fall arrest systems. It is of the utmost importance to identify a method of rescue from deployed fall arrest systems after a fall has occurred, and have the means to effect the rescue on hand. In some situations it may be possible to use the fall arrest anchorage itself as an anchorage capable of use for rescue. However, in some situations, it is possible that access to the fallen individual will be blocked by other structure making it impossible to be used as a suitable anchorage for rescue. For this reason, always install rescue anchorages to rigid structures for attaching hoists or other retrieval equipment at locations that can be reached by rescue personnel. Note whether rescue must be up or down. If you rescue upward, anchorages must be high enough to raise the fallen worker above the walking/working surface. Individuals who will be using the Vertical Ladder Stanchion must be trained in the rescue plan and have the equipment on hand to implement it in an emergency. In case a worker has been injured or is unconscious, always consider the evacuation method and path to be used after the worker has been retrieved.

Contact Fall Safe Engineering for help in identifying possible methods of rescue and rescue planning.

INSPECTION

Prior to each use, the worker must inspect the system for any physical damage, wear, corrosion, or malfunctioning parts. If an inspection reveals a problem or unsafe condition, remove the entire system from service until it can be re-certified by a Competent Person. Additionally, the system must be inspected by a Competent Person at intervals of no longer than once a year. Inspection procedures are described in the “Inspection Log”. Results of each Competent Person inspection should be recorded in the “Inspection Log”.

SERVICING

A qualified person trained in the inspection and servicing of system components must carry out servicing of this system. The company's safety officer should maintain a record log of all servicing and inspection dates. The system and all components must be withdrawn from service immediately, and clearly marked "DO NOT USE" if subjected to fall arrest forces. Those components may be returned to service only after being re-certified by a qualified person, or repaired by a Fall Safe approved service center. Only original Fall Safe equipment replacement parts are approved for use in this system. Contact Fall Safe with questions and when in need of assistance.

WARNINGS AND LIMITATIONS

Proper care should always be taken to visually scan the work area prior to use. Remove any obstruction, debris, and other materials from, and beneath the work area that could cause injuries or interfere with the operation of this system.

Be cautious of swing fall hazards if working horizontally to the side of the Davit. DO NOT exceed 15° work zone from vertical, and DO NOT pass the SRL line over a fixed object that may act as a "pulley" in a side load scenario.

Fall clearance requirements are dictated by the SRL used in the system. Refer to the SRL manual for proper clearance requirements.

Users should be familiar with pertinent regulations governing the use of this system and its components. Only trained and competent personnel should install and supervise the use of this system.

Use only Fall Safe supplied or qualified compatible components.

If you have any questions regarding the correct installation or use of this product DO NOT USE. Contact Fall Safe Engineering at Ph. (303) 424-8650 or Fax (303) 424-8670.

INSPECTION LOG FOR THE VERTICAL FIXED LADDER DAVIT

Company: _____ Location:_____ Date:_____

Job Site: _____ Log No.: _____ System No.: _____

Describe non-conforming conditions in the boxes below:

Inspection Criteria	Missing Parts	Labels Readable	Corrosion	Deformed Parts	Cracked Parts/ Broken wires	Excessive Loading
Ladder intact/rungs not bent?						
Davit centered on rungs?						
Alligator clamps tight on rungs (3 rung clamps)						
SRL Anchor Ring tight?						
Carabiner/bow shackle intact?						
SRL functioning/locking up?						
Davit attached to 3 rungs?						
Labels in place and legible						

Has a Rescue Plan been prepared?_____

Is Rescue Equipment on hand?_____

Have workers been trained in the Rescue Procedures and been given a copy of the Rescue Plan? _____

_____

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