

**December 6, 2022**

**Using Jacks and Stands**

### **PURPOSE/APPLICATION**

To define the safe operating procedures for the use of cable jacks and stands in a manner that informs and instructs employees on the key health and safety hazards and controls to remember when using jacks and stands.

#### **PPE**

- Strike Standard PPE

#### **TRAINING**

- Strike Orientation

#### **HAZARDS & CONCERNS**

- Crushing injury
- Hand & Finger pinch points
- Equipment or property damage



### **SAFE OPERATING PRECAUTIONS**

- Ensure the equipment is used properly as per manufacturer's directions, including completing any pre-use inspections required. If any defects are noted, the equipment must be removed from service and notify the supervisor immediately to ensure equipment is repaired (i.e., special attention to reel stands with a wooden base, as these can have interior rot).
- Be aware of the equipment's limits.
- If any lifting equipment is considered faulty, do not use. Immediately apply tag out procedures to ensure that other employees do not use the equipment until it has been properly fixed or replaced.
- Know the correct lifting points of load being lifted when using various jacks/stands. When working in tightly confined spaces, be careful that you are not at risk of being pinned between the jack handle and the wall should the jack shift accidentally.
- The jack should be placed at right angles to the material being lifted, so that it does not slip off the jack. Centre the load on the saddle prior to lifting. Ensure to place jacks/ stands on level and sturdy ground to prevent tip overs, as off-center loads may cause damage to the jack and the object to fall.
- Once the object is raised with the jack, use jack stands as secondary supports. These could prove lifesaving if the object were to accidentally shift off the jack.
- If you need to raise the height of a jack stand, use the correct support pins to properly hold the stand in place.
- Never raise an object with anyone inside it, or with anyone standing or working in the lift area without following Critical Lift SWP.

### **GENERAL PRECAUTION DOS/DON'TS**

#### **DOs**

- DO** Ensure the jacks and stands are placed on a level, flat and firm surface (e.g., concrete or cement floor as opposed to soft ground) to prevent the object from shifting and falling.
- DO** Ensure that you are using the right jack and stand for the job.
- DO** Identify the lifting capacity of your equipment and do not lift more than this. Check the manufacturer's recommendations.
- DO** Ensure the load is supported with the center of gravity above the center of the pipe stand.

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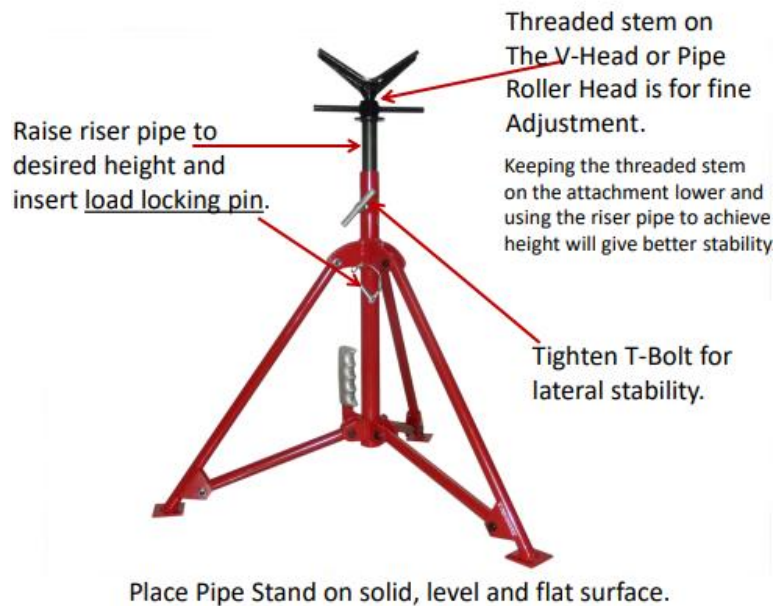
- DO** Ensure that your jacks and stands are examined by qualified personnel at least once per year to assess whether the equipment is still able to handle the load recommended by the manufacturer.
- DO** Monitor that free standing support tools and lateral force is not to be applied to loads supported by pipe stands.
- DO** Use load locking pin on the riser pipe sleeve.
- DO** Keep the area free of obstructions, grease, oil, trash, and other debris.
- DO** Complete a walkaround of the immediate work area prior to starting. Look for obstacles that may need to be removed.

**DON'Ts**

- DON'T** Exceed jack or stands identified working load limits.
- DON'T** Alter or modify the jack in any way.
- DON'T** Use any of your lifting equipment if it looks damaged or is faulty.
- DON'T** Crawl under an object supported only by a jack.
- DON'T** hammer or force pipe stands into position.
- DON'T** Exceed the jack travel shown on the decal or continue to apply lever force to extend the jack after stop contact has occurred.

**PIPE STAND SET UP**

1. Make sure all equipment is inspected and set up per its instructions.
2. Locate a clear, level, stable location for the stand, other equipment, and the operator.
3. For folding stands, make sure the legs are fully open and the feet sit squarely on the floor/ground.
4. If equipped with rollers, make sure that the rollers are properly adjusted for the pipe size. Ball transfer heads can be used with the VJ and VF stands. Make sure the fasteners are secure.
5. Height Adjustment:
  - Stands equipped with a lock ring: Securely grip the head assembly. Loosen hand screw. Raise lock ring to disengage elevator tube. Move head assembly to desired height and lower lock ring to engage elevator tube. Do not raise the elevator tube past the hand screw. Make sure the lock ring engages the elevator tube and securely tighten the hand screw.
  - Stands equipped with an adjusting collar: Securely grip the head assembly. Raise adjusting collar to allow elevator tube to move. Move the head assembly to the desired height and lower lock ring to hold the elevator tube in place. Make sure the elevator tube is secure.
  - Models equipped with Jack Screw for fine adjustment: Hold the head assembly stationary and turn the jack screw handle to position as desired. Do not force the Jack Screw handle, this can allow the screw to come loose from the stand.
6. Place stands to properly support the pipe.
  - Generally, pipe should be supported in at least two places. The number and placement of stands depend on the specific circumstances, including pipe size, length, and weight.
7. Carefully place the pipe on the stands. Make sure that the pipe is properly centered on the stands to reduce the risk of tipping.
  - Do not drop the pipe onto the stands.
  - Do not exceed the stand ratings.
  - Make sure pipe is stable and secure. Always stay clear of supported loads.



### **CR SERIES REEL JACKS**

Each jack must be properly aligned at the lifting points (7 or 8) and supported in a manner that the jacks cannot slip, or the load cannot shift. Make sure the lever bar sockets are facing in one direction to improve operating procedure.

Once jacks are raised to the required height ensure to check that the reel is level to prevent the reel from moving once the pull commences. Check stands continually (not just at the start) to ensure everything is still level and going smooth.

**IMPORTANT:** Refer to the decal on the side of the jack housing to locate the model number, capacity, and recommended lever bar length for each model is also rated for the load to be placed on it.

**CAUTION:** Be sure that the jack's rack bar and mechanisms are free from foreign objects; otherwise, it may affect the jack performance.



◀ *Two CR321B Reel Jacks are used to support this cable spool for line feeding.*

**To Raise:**

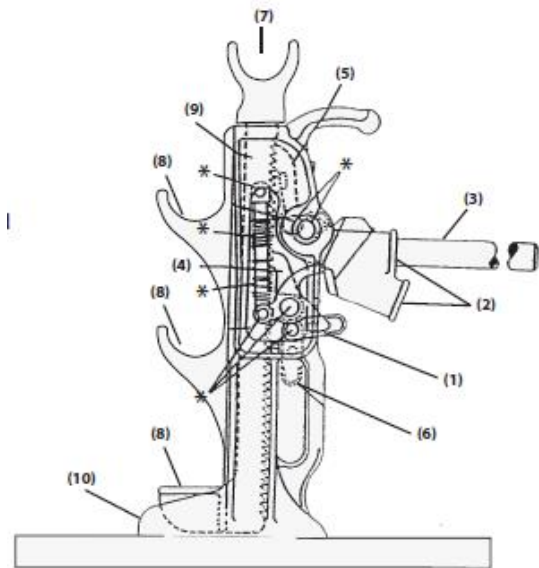
Move reversing lever to the "up" position (1) on both jacks.

1. Select the appropriate socket position (2) and insert lever bars (3).
2. Only use approved and rated lever bars for reel jacks do not substitute.
3. Make sure that the lever bars engage the full depth of the sockets.
4. In a tandem lift operation, each person will grip the lever bar (3) and exert "up" and "down" strokes on each jack synchronously, gripping firmly and completing a controlled downward force.
5. Ensure each pawl (4 & 5) engages properly prior to each stroke completion.

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**To Lower:**

Move the reversing lever to the "down" position (6) on both jacks.

1. Select the appropriate socket position (2) and insert lever bars (3).
2. Make sure that the lever bars engage the full depth of the sockets.
3. In a tandem lift operation, each person will grip the lever bar (3) and exert "up" and "down" strokes on each jack synchronously, gripping firmly and completing a controlled downward force.
4. Ensure each pawl (4 & 5) engages properly prior to each stroke completion.
5. When lowering with a cable reel on the stands ensure to chock the reel to prevent possible roll away.


**MAINTENANCE & LUBRICATION INSTRUCTIONS**

1. Comply with the inspection, testing and maintenance requirements of ANSI B30.1 as determined from use, experience or as specified by a qualified person of authority. ANSI B30.1 Safety Standards - visit [www.ansi.org](http://www.ansi.org) and type "jacks" in the search window.
2. Keep jack clean, free of grit, and in good working condition.
3. Do not lubricate the tooth side of the rack bar and retaining pawl. Lubricate the back side with #2 graphite grease.
4. Lubricate other working parts periodically with a good grade of SAE 20 wt. Oil - Avoid lubrication of the base and cap load surface.
5. Periodically lubricate parts marked with an \*(asterisk).
6. \*Note - Some of these stands are a combination of wood and metal. Wood being the weaker of the two materials breaks down or rots out quicker. Pay extra attention to this when inspecting.

**BOTTLE OR HYDRAULIC JACKS**

Air may become trapped in the hydraulic system during transit.

To purge air:

1. Open the release valve by turning the handle counterclockwise.
2. Pump the handle rapidly four full strokes. This will expel air that may have entered hydraulic fluid passages during transit.
3. Close the release valve by rotating the handle clockwise and pump the handle.
4. If the lift arm is raised, the jack is ready for use. If not, repeat this procedure.

**Inspections & Repairs**

Ensure that a competent person inspects equipment annually.

Before lowering the jack, be sure tools trays, stands, etc. are removed from under the object. Release locking devices before attempting to lower the jack.



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Repairs to the equipment must be performed by qualified personnel, using original equipment manufacturer (OEM) parts or equivalent.

**Adding Hydraulic Fluid**

When adding or replacing hydraulic fluid, always use fluid recommended by manufacturer.

1. With the saddle fully lowered and the jack on level ground, remove the filler plug.
2. Hydraulic fluid should be filled to the level of the hydraulic fluid filler plug hole (it is recommended to place the jack in a containment or spill tray to prevent any leaks).
3. If low, add hydraulic fluid as needed.
4. All moving joints require lubrication often. To lubricate:
  - a. Remove handle and grease the lower end of the handle (where it rotates in the handle socket).
  - b. Using a grease gun, grease the lift arm pivot shaft grease fitting until grease appears at the end of the shaft.
  - c. Oil all lift arm linkages, front wheels, and rear casters.

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