

## TECH TIP

# RAINIER CANOPY TENT JACK

Our Tent Jack is supplied partially unassembled to facilitate shipping. Complete directions are supplied, and when followed will put perfect handling balance into the Tent Jack operation.

### Step 1.

Check to see if all components are present:

- One 12' 10" long piece of extruded aluminum tube
- One top-mast assembly with roll wheels pre-assembled with strap mechanism
- Winch assembly (DL-B1200 A Winch) with handle removed. Pre-assembled with strap.
- Handle for winch assembly
- Tri-leg base for assembly
- Bag of bolts and pins

### Step 2.

With the mast laying on its side, align the plate on winch assembly to holes in the tube. Be sure winch assembly is setting behind the tube with the strap in line with the tube. Affix with three (3) each 3/8" x 3" bolts and nuts.

### Step 3.

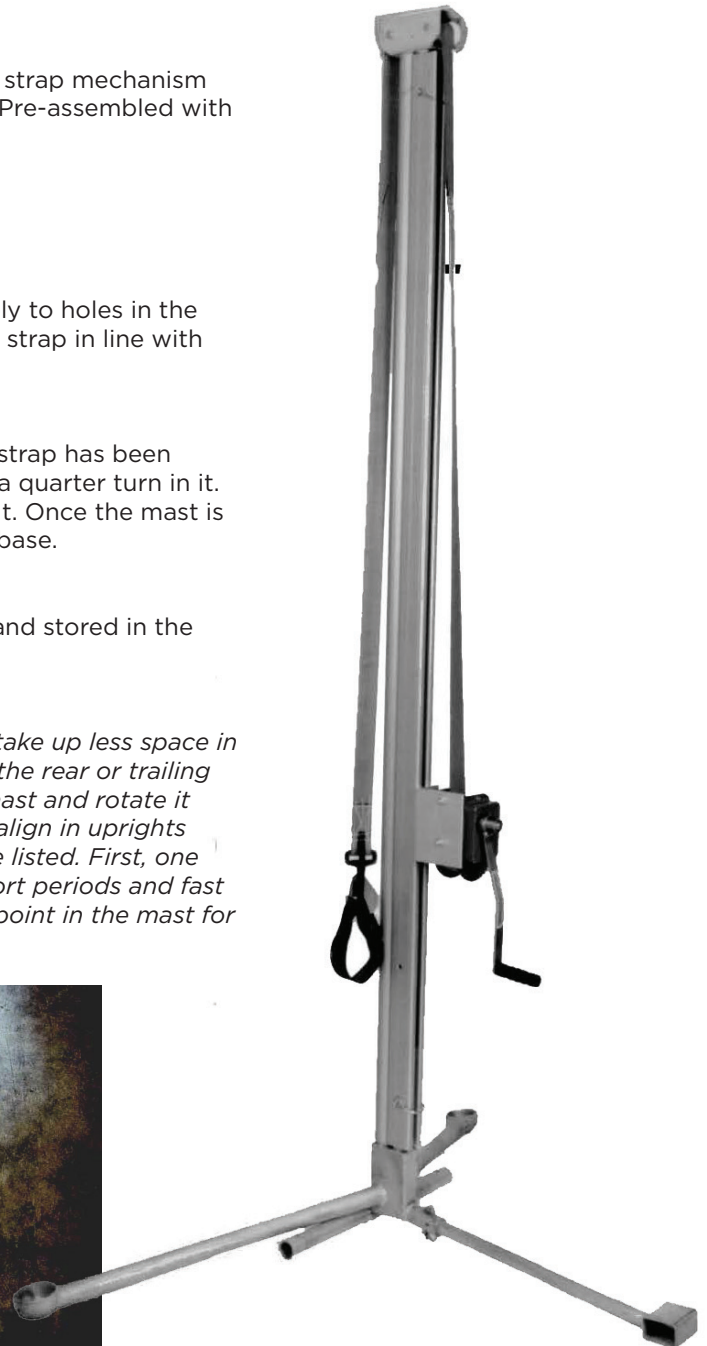
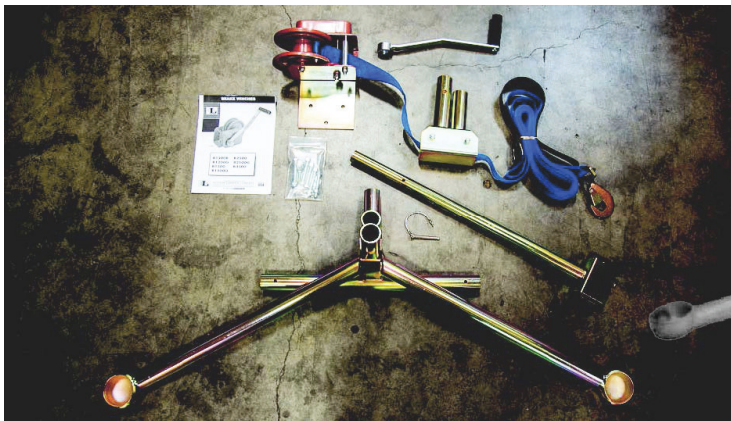
Insert the top assembly into the mast tube making sure that the strap has been straightened and aligns itself with the winch. The strap will have a quarter turn in it. Then bolt the top assembly into the mast with a 3/8" x 2-1/2" bolt. Once the mast is fully assembled, you are ready to set the mast on the tri-legged base.

### Step 4.

The base is in two pieces with the rear or trailing leg removable and stored in the cross tube.

### NOTE.

*This makes the base assembly more convenient to pack and will take up less space in the delivery truck. Remove bail pins and assemble the base with the rear or trailing leg pinned into place, then set level on the ground. Pick up the mast and rotate it to its upright position, slipping it over the base so that the holes align in uprights with the holes in the aluminum mast. Two methods of pinning are listed. First, one 3/8" bail pin (square bail) is used when the jack is needed for short periods and fast reassembly. A second hole is provided just about the connection point in the mast for storing the second bolt or pin.*



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### Techniques for Using the Jack, Helpful Hints, Pick-Up Points.

- **Standard and Round Tube Frames.** Rainier Tent Jack is provided with a hook and delta ring on the strap and functions as a sling, making it possible to connect to various parts of the canopy frame tent quickly. It is ideal to pick frames reasonably close to the steel connector. Rainier Tent Jack(s) should be placed to one side of the intermediate eave to go around the aluminum tube.
- **Super Tube Frames (i.e. Full Strength Frame Systems).** Pick frame up within 3 feet of a connector.

**CAUTION!! Never pick up a frame in the middle of its tube length.**

### Optional Handling.

- **Optional Lifting Method (Installing 30' or 40' Frames).** Rainier Tent Jack is 13' 6" tall and can be used to lift the crown connector with rafters already attached. While being held, other rafters and ridges can be assembled with more ease.
- **Installing Cross Cable after Frame Assembly.** Lift the crown with the jack and take pressure off the perimeter. Pull tubes inward to install the cable.

### Jack Control.

- The Rainier Tent Jack was designed to lean into the work to keep the strap pulling straight from the top of the mast. Control the jack by putting your weight on the back leg. Leg does not need to be touching the ground while lifting.

### Jack Placement.

- **Raising the Tent.** Place jack with front two legs (cap ends) under tent and the mast close to eave rails (within 6") of tent. Attach sling as suggested above, place the jack so when the tent frame is raised, there will be clearance for leg installation.

### NOTE. When raising the frame, it will rotate away from the jack.

- **Single Jack Operation.** When a single jack is used to lift a frame, additional persons should be steadying the frame as it is being raised from the ground. This will prevent oscillation or wobbling which can cause side pressure on the jack assembly.
- **Multi-Jack Operation.** This is best for most frame tents if the length extends 40 feet or more. The general practice is one tent jack for every 20 feet down the horizontal length (side) of a canopy tent.
- **Lowering the Tent.** Place jack with two front legs under the tent. The mast should be 18"-24" away from the frame to allow for frame rotation to come toward the jack when lowering.

### Raising a Tent.

- Always "tie-off" the tent before starting the lifting operation. Wind gusts may catch the tent on the way up and tip it over.
- Place the sling strap around the frame member and connect to hook. Crank the winch handle clockwise while making sure the frame is lifting straight and in line with the jack mast. When the winch is operating and the load is applied, it will produce a loud, sharp ratchet noise.
- Raise the first side of the tent slightly above the height needed, slipping the legs on and pinning them to the frame connector. Lower the jack until weight sets on the leg. Once the tent is secured and tied down on the first side, remove the jack(s) and move around to the other side.
- When using multiple jacks, be sure to keep the strap tension as even as possible and the eave relatively horizontal to avoid any undo pressure on one or more jacks.
- Place the jack again as described, connect the canopy jack strap to the frame and repeat the cranking operation to lift the frame to the desired height for leg installation. Remember to insert the leg into the steel fitting and pin immediately. Once the tent is tied down, remove the sling straps and return the jack to storage.

**NOTE. Reversing Jack.** Lower the tent by turning the winch crank counter clockwise. There will be no ratchet sound. The winch assembly has clutches to allow the reversal (lowering) of the tent. Always keep a firm grip on the crank handle for safety reasons. If you need to stop on the way down, turn winch handle clockwise until you hear a ratchet sound, which indicates handle is latched and will hold its position.

### Safety Precautions.

- **General safety factors.** All equipment on your Rainier Tent Jack has working strengths of 3,000 pounds and above. A 3:1 safety factor or more is suggested; therefore, do not expect a jack to lift more than 1,000 pounds each.
- **Good common sense safety practices need to be employed while lifting canopy tents.** Always be sure the jack is on a good stable base and is situated so that it can rotate up on the two front legs as the lifting procedure and raising of tent progresses.
- **Keep hands firmly on the winch handle during operation.** When reversing (lowering a tent), the winch handle may turn free if not controlled.

**CAUTION!! If lowering is halted in mid-process, always turn winch handle back (clockwise) until ratchet sounds.**

