

LADDER STANDS

by CarterF. Lewis

A ladder stand consists of a ladder and a platform with a seat. The platform has a contoured rear section to partially fit around a tree. The method of attachment to the tree varies: ropes, chains, ratchet straps, cam buckle straps. The materials used for the ladder and platform/seat varies from stand to stand. There are manufactured ladder stands and homemade ladder stands.

MANUFACTURED LADDER STANDS

1. Ladder rails

- a. Usually lightweight round or square metal tubing with 5 to 6 foot sections joined by slip in inserts. This method of joining allows the joint to flex under repeated loading and unloading, which can cause fatigue failure.
- b. A better choice is rails that are wide, formed extrusions joined with extruded plates that bolt the sections together: these are stronger rails and greatly reduce the movement of the joints.

2. Ladder rungs

- a. Made of lightweight tubular or extruded metal with or without ribs for additional grip. The length of the rungs varies. Rungs are welded or crimped to the rails.
- b. Rungs must be long enough to allow maneuvering with both feet on the same rung. Distance between rungs should allow comfortable climbing.

3. Platform and seat

- a. Platform may be tubular or extruded materials that are welded or bolted together. The rear of the platform should be shaped to make maximum contact to the tree and have provision to be solidly connected to the tree. The surface of the platform can be slats or expanded metal. The platform should be large enough to allow for standing and maneuvering.
- b. The seat may be rigid or flexible materials and should be adjustable for comfort.

HOMEMADE LADDER STANDS

1. These are usually made of various combinations of wood, metal, plastics, etc. Fasteners include bolts, screws, nails, ropes and welding.

Few people have the knowledge and expertise to design and build a stand of this type; therefore they must use extreme caution with these stands.

2. If one chooses to use a homemade ladder stand the same procedures and cautions must be used that apply to manufactured stands.

ASSEMBLY OF AND ERECTING A LADDER STAND

1. Assembly
 - a. Assemble the stand according to the manufacturer's instructions. If parts are damaged or missing contact the manufacturer. Do not make substitutions unless the manufacturer agrees that doing so will not compromise safety.
2. Erecting the stand
 - a. Follow the manufacturer's instructions.
 - b. Always have two or more people when erecting the stand.
 - c. After initially setting the stand against the tree, anchor a board to the ground with rods to prevent the rails from sinking into the ground. The board should have notches cut into it for the rails to sit in. This keeps the rails from moving.
 - d. Before setting the stand against the tree attach the lifeline to the platform/seat. Also attach a second lifeline to the highest rigid part of the platform/seat. This lifeline should reach the ground when the stand is placed against the tree. Both lifelines should be anchored at or near the ground, making it easier to raise the prussic device when climbing as well as making self-rescue easier should that become necessary.
 - e. When making the first climb to secure the platform/seat to the tree have one or more people to hold and stabilize the stand. Put on the fall arrest harness and adjust it for proper fit. Connect each end of a climbing "Y" lanyard to the chest or waist rings of the harness. Connect the middle of the "Y" lanyard to the second lifeline using a prussic device. Use this fall arrest system to climb up and make the necessary attachments to the tree. Now attach the main lifeline to the tree and attach the harness lanyard to the main lifeline using a prussic device. The climbing "Y" lanyard and second lifeline can now be removed. The main lifeline will remain on the tree until such time that the stand is taken down.
 - f. When taking the stand down use the reverse procedure as outlined above.

1. Fall arrest system

- a. Everyone must properly employ a fall arrest system from the time they leave the ground until such time as they are back on the ground
- b. A fall arrest system consists of a full body harness (parachute style)

which has been properly adjusted to fit; a life line which should reach the ground from the highest point of climb (see 2.d. on page 2); a lanyard that attaches to the harness or is an integral part of the harness; a prussic device that connects the lanyard to the lifeline.

2. Inspection of stand and equipment

- a. A complete inspection must be made of the stand and all other equipment before each use. If any problem is found, do not use the stand until repairs or replacements have been completed.

3. Haul lines

- a. Always use haul lines to raise and lower guns, bows and other equipment. Guns should be raised and lowered unloaded, action open and the muzzle covered and pointed down.
- b. Your first aid pack should be on a separate haul line so it can be pulled up only if needed while in the stand.

4. DO

- a. Be aware of the rated weight load of the stand and the number of persons for which the stand is rated. Do not exceed the maximum rated loads.
- b. Perform a complete inspection of the stand before each use. Do not use a stand that is damaged, broken, missing parts or not firmly secured to the tree.

5. DO NOT

- b. Attempt to cock a crossbow with the stirrup and rope device while in a stand. Doing so may cause one to lose their balance resulting in a fall.