

Foldable Trailer Boat Lift - Manual



General:

Boat lift is a means to lift a boat (motor boat or the like) when loading to or from a boat trailer on land. The lift may not be used for other purposes.

To avoid accidents, it is very important that you read and follow the safety instructions and all other instructions below.

Safety Instructions:



ATTENTION!

Risk of serious person injury exists if the instructions below not being followed !!

- Only someone with full knowledge of the lift and boat handling must work with the Boat Lift
- Make sure no unauthorized persons and especially children not staying nearby for work in progress
- Staying not close and especially not during a boat elevating / suspended load
- Perform all lifting motion slowly, cautiously and with good control
- Always pull the vehicle's parking brake when the car is parked with the trailer attached
- Hand brake on the trailer also drawn to and / or place stop blocks in bow and behind the trailer wheels to prevent rolling during the lifting operation
- Check that the lift all parts and the lift belt with its seams are in good condition before use
- Store the boat lift but above all the lifting belt protected from sunlight and moisture
- Make sure that the lifting belt hanging down in the line between the lift poles when the lift begins. Check again when the boat starts to move upwards
- When lifting the boat's bow part shall the lift belt be placed where the keel part is not tilted up to prevent the sling from sliding forward. Also the rounding sides of boat's bow may be avoided. Use "draw ropes" from the boat's stern corners to lift the belt on each side of the boat if the boat's shape allows the lifting strap at risk of sliding sideways
- The movement of the trailer must be done manually after being disconnected from the vehicle's tow hook, when the boat is in the raised position. The trailer wheels must not touch the lift or boat when it is rolled forward or backward
- When lifting the boat must always the boats other end (bow or stern) be firmly anchored. E.g. the stern resting on a steady trestle when the bow is lifted or that the bow is attached to the trailer when the stern is lifted. The cars / trailers hand brake is always engaged and / or trailer wheels fixed with blocks
- The lift may not lean either sideways, forward or backward. Checked this before lifting takes place, but also occasionally during lifting. Check with a spirit level against respectively pole.
- The boat lift must never be used for lifting over 1500 kg
- The ground must be flat and even where the lift and boat are located

Technical data:

| | |
|----------------------------|---|
| Length (L): | 2900 mm (1660 mm divided for transport) |
| Width inside (W): | Stepless adjustable up to 2750 mm |
| Hight (H): | 2500 mm (+ lift 0 - 380 mm) |
| Max load boat lift: | 1500 kg |
| Lift belt: | Approved for U-lift of 2 ton (7 x safety before failure) in accordance with EN 1492 |
| Weight lift: | Frame 22 kg + others approx. 16 kg |
| Data for boat: | <p>The maximum boat width limited by dimension " W " (adjustable) but consideration must be given to the turn handles of a length of 120 mm each and have a distance of about 940 mm from the base . Usually turns the hull inwards where the handles are located, while some types of boats have fairly straight sides and are wide also at the stern. Observe also the dimension " H " so that the lift's upper profile is above such foredeck and any pulpit. The distance to the foredeck, however, is constant during the lift movement. If the lift first being divided with the knobs on the center can also be fitted between the bow and its pulpit / rails.</p> <p>The boat's total weight about 2 tons (depend on the boat's weight distribution, engine placement etc.</p> |



Pic. 1

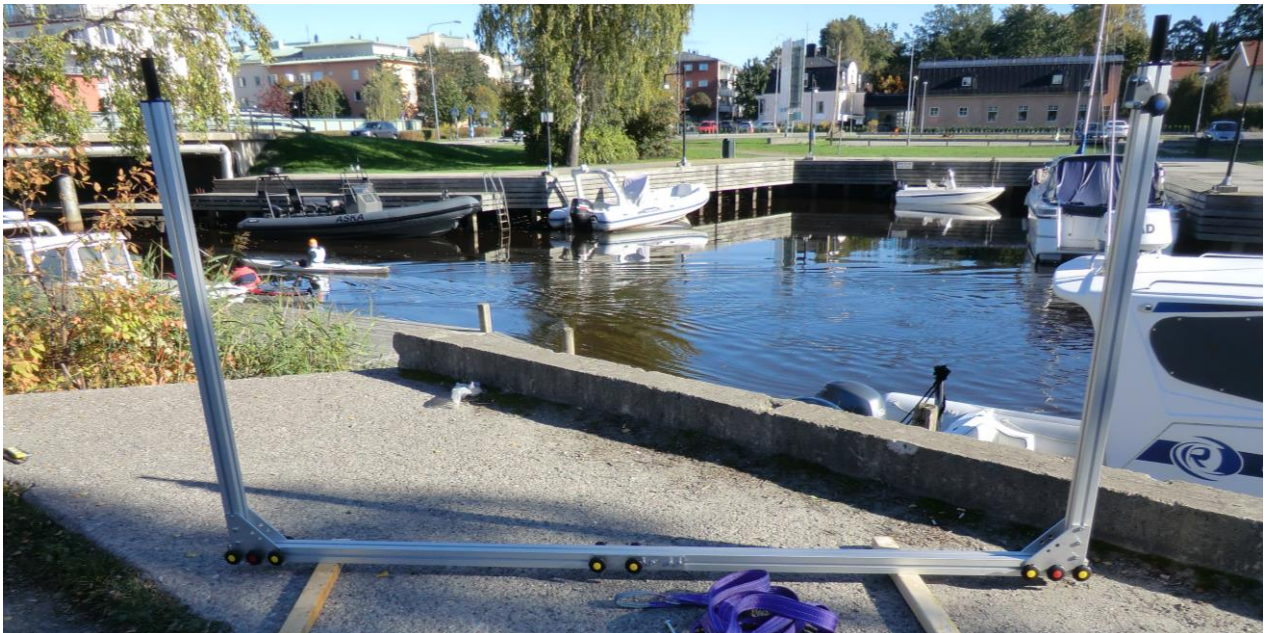
All parts:



Pic. 2

Assembling Boat Lift:

First mount the frame up and down by first loosening the knobs slightly and then fold out the legs. Red wheel represents the pivot point and unloaded only slightly. NOTE ! Do not loosen the knobs too much to loosen from its slot nut. The legs can be moved sideways and the distance between the inside of the legs should be the boats wide + approx. 10-20 cm. Set the measure, verify that the legs are fully extended at right angles and then tighten all knobs hard by hand.



Pic. 3



Pic. 4:

- Mount one end of the lifting belt to the pretensioner with blue knobs (Pic. 4). Fit also the other end to the other frame corner with its bolt but first make sure the belt is not twisted.

The bolts (M12) is pushed in completely that the thread not to come in contact with the belt and also nuts turned completely fixed by fingers (no tool).

There are two holes on each corner. Use the smaller hole for the bolt.



Pic. 5:

- Placing the two foot tubes with its threaded rods roughly where the lift must be placed beside the boat's bow or stern part.



Pic. 6:

- Assemble the Boat lift complete by connecting the aluminum frame together with the two foot tubes top thread.

If it is hard to get the two parts together, check that the parts are in the same line and shake a little that the thread get about 11 cm inside the black tube above.

Lifting the boat from land to a trailer:



Pic. 7



Pic. 8



Pic. 9

Prepare the Lifting:

- The boat is on boat stands or trestles.
- Place the Boat Lift over the boat bow.
- Park the trailer in the front of the boat and disconnect it from the car's tow hook.
- If the lift is to be placed behind the boat forward boat stand the lift belt end must be loosened, put below the boat behind the boat stand and up to the corner of the frame again. Check that the belt is not twisted and assemble the bolt. A stool to stand on makes the above operation easier.
- Check that the distance between the lift poles and the boat both sides are equal.
- Clear the ground below each foot from stones etc.
- Place some kind plate of wood below the foot if the ground is very soft like grass etc.
- Adjust each foot (Pic. 8) before lifting by first tighten the blue knob.
- Turn the wing-screw un-clockwise until it is 5-10 mm above the ground.
- Loosen the two yellow wedges by lifting them up.
- Check with a spirit level (Pic. 9) that each vertical foot-tube or the frame above does not lean in either the boat's longitudinal or transverse direction.
- If the lift leans in the boat's longitudinal direction turn the vertical tube until it is vertical. Push down the two yellow wedges and check with the spirit level again.
- If the lift leans in the boats cross-direction it can be compensated by raising one side a few centimeters by turning its handle a number of rev. before the lifting begins. A board of wood can also be placed below the lower side foot.

- NOTE ! Do not place the lift there the keel is inclined upwards and / or hull swings inwards when there is a risk that the lifting belt sliding forward. Use ropes from the boat's stern corners to the lift belt on each side of the boat to avoid sliding.

- Pre-tension the belt by first loosen the two blue knobs on the pre-tensioner (Pic. 4) slightly.
- Draw the pre-tensioner downwards and help with pulling the strap so that it is as taut as



Pic. 10



Pic. 11



Pic. 12



Pic. 13

possible. Tighten the blue knobs by hand.

- **IMPORTANT!** Check that the belt against the boat is in the line between the lift poles on each side of the boat. Check this often during the lift movement.

Lifting the bow and move the boat to a trailer:

- Two people twist their individual handles a decided number of turns at the same time. Decide such that now we turn 10 half-turns = 30 mm. One full turn raises= 6mm. Easier to count half-turns. If you work alone, turn one handle 30 mm and then 30 mm on the other side, alternately.

- When the lifting belt becomes tight control that the posts do not lean against any direction and everything feels stable. Check with the spirit level. Repeat the check frequently, every 30 mm raised.

- Turn each foot-wing-screw (Pic. 8) clockwise that it's lower plate being pressed against the ground.

- Lift the boat, step by step, with good control.

- Maximum lift height is 380 mm and soon before maximum high becomes a red color visible above the handle nut after which the lifting movement must end immediately.

- Stop the lift movement when the high is enough that the trailer can be pushed in below the boat.

- Loosen the boat stand or trestle below the bow.

- Push the trailer backwards below the boat by hand (without the car) careful that the trailer doesn't touch any parts around it.

- Lower the Boat Lift that the boat being placed on the trailer

- Make sure that the boat is resting well on the trailer and also has left the rear trestle or boat stands.

- Attach the trailer winch wire (or strap) in the bow and tighten slightly.

- *If a pressure on the rear stand/trestle remains you should also lift the stern that you can release the stand. See section "Lift of stern" page 9.*

- Take away the Boat Lift, connect the trailer to your car and launch your boat in to the water!

Boat up from the water:

- When the trailer being pulled up from the water the boat stern should stay behind the rear support roller of the trailer with about 2/3 meter (preferably slightly more). The front V-support on boat trailers are usually movable backward / forward and can be adjusted against the bow after the trailer has been drawn up on land where the ground is even. Pic. 14 shows a boat with its stern backwards of the trailer. The V-support on the trailer should be moved against the bow before transport.

If your boat can't hang out about 2/3 meter behind your trailer you should start at your boat parking on land by first lifting the stern. See page 9 for different ways of doing this.



Pic. 14

Loosen the boat on land from the boat trailer (the stern is behind the trailer):

- When the car with the trailer is parked on land, lock the cars (and if possible the trailers) handbrake and then place a trestle or boat stands tightly below the stern (Pic.15).

- *If the trestle is higher than the boat bottom but the height difference quite small, one can instead of using the Boat Lift raising stern, driving the trailer up on a piece of wood below each one of the trailers wheel. See "Alternative way to raise the stern" page 9.*

- Insert the trestle (Pic. 15) or boat stands very tight below the stern.

- Then lift the boat's bow until the trailer can be rolled away from the boat. The method requires that the stern hangs out a good distance behind the trailer. Read page 4 – 7 until the bow is lifted up.

- After rolled away the trailer, insert also a trestle or boat stand below the bow and lower the Boat Lift until the boat is parked well.

- Unmount the Boat Lift



Pic. 15

Lift of stern:



Pic. 16

- If the stern of the boat has to be lifted the boat always rest on the trailer, whose handbrake (if any) must be engaged and the wheels has to be locked / secured with blocks. In addition, the winch on the trailer to be connected to the boat and locked.

- Assemble the lift and lifting the stern. Read page 4 – 7 for assembling and using the Boat Lift.

- Lower the stern on a trestle (Pic. 15) or boat stands.

- Then lift the boat's bow until the trailer can be rolled away from the boat. Read page 4 – 7 until the bow is lifted up.

- Lower the bow on a trestle or boat stand below until the boat is parked well.

- Unmount the Boat Lift

Alternative way to raise the stern:



Pic. 17

Another way is to raise up the trailer with the boat's stern is by parking the car with the trailer about 1 m from the final parking place and then put one per side screwed stepped wooden structure (Pic.17) behind or in front of the trailers wheel.

Then drive the trailer's wheels upstairs and place a trestle tight below the stern that the boat bow can be raised as usual. Assumes that the stern stands out a decent distance behind the trailer. The example in the Picture has a height of $3 \times 45 = 135$ mm.



Pic. 18

You can also buy ready-made car-ramps (Pic. 18)

Pack and transport the lift:

The frame folded (Pic.19).

The frame can also be divided in half for easier fit inside a smaller car. Remove the yellow knobs on the center so that the frame consists of two parts that can be placed next to each other. The total length becomes about 1.65 m and can easily be placed even inside a small car.



Pic. 19

When the frame is divided as described above, it can be placed in a bag (option) together with the lifting belt and some bolts.



Pic. 20

The complete foot can easily be unmounted by taking away the vertical tube and also the lower tube with the big wing-screw - when needed for transport.



Pic. 21