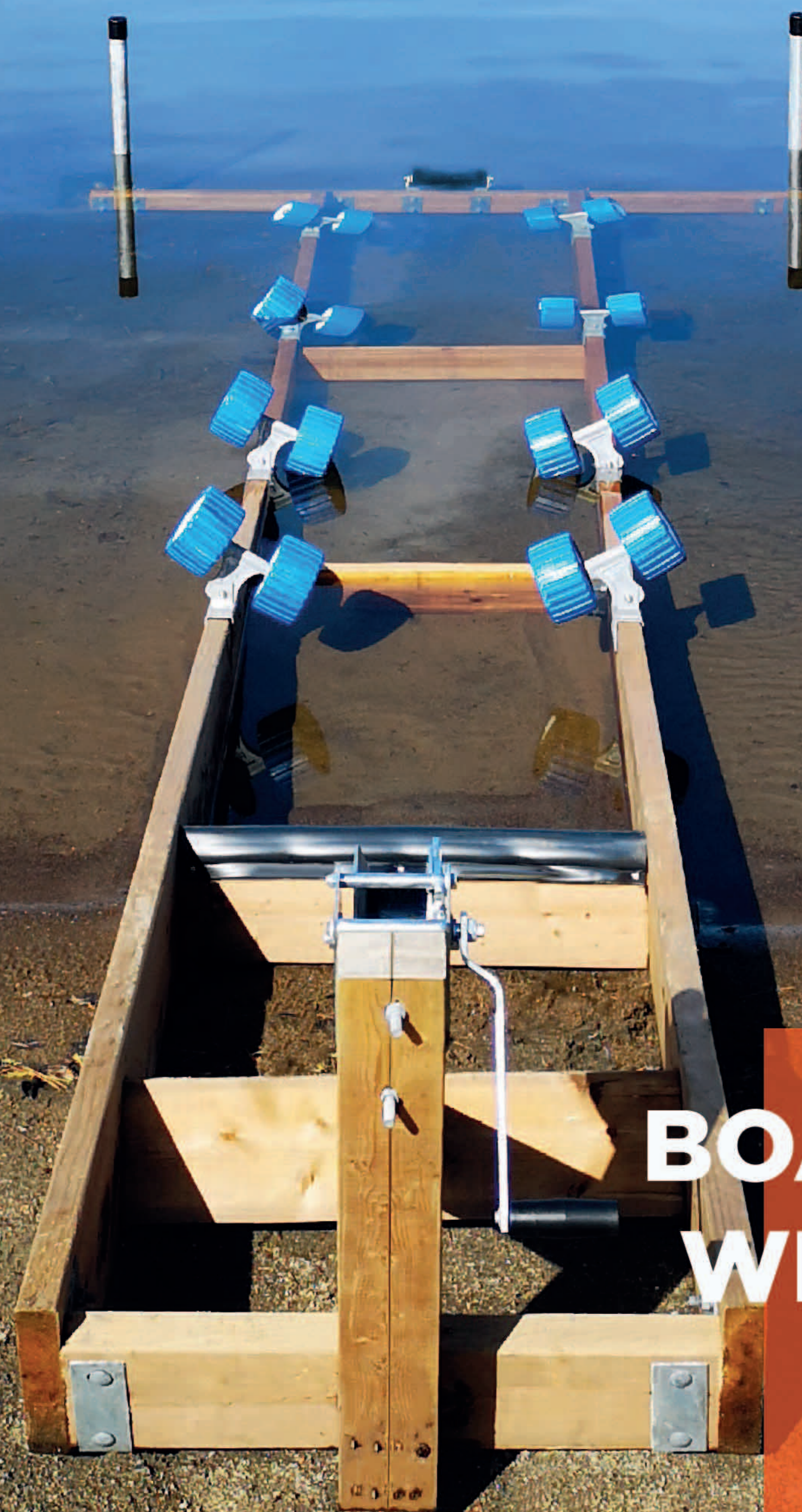




BOAT RAMP WHEEL KIT

(# 34111)

Assembly Guide

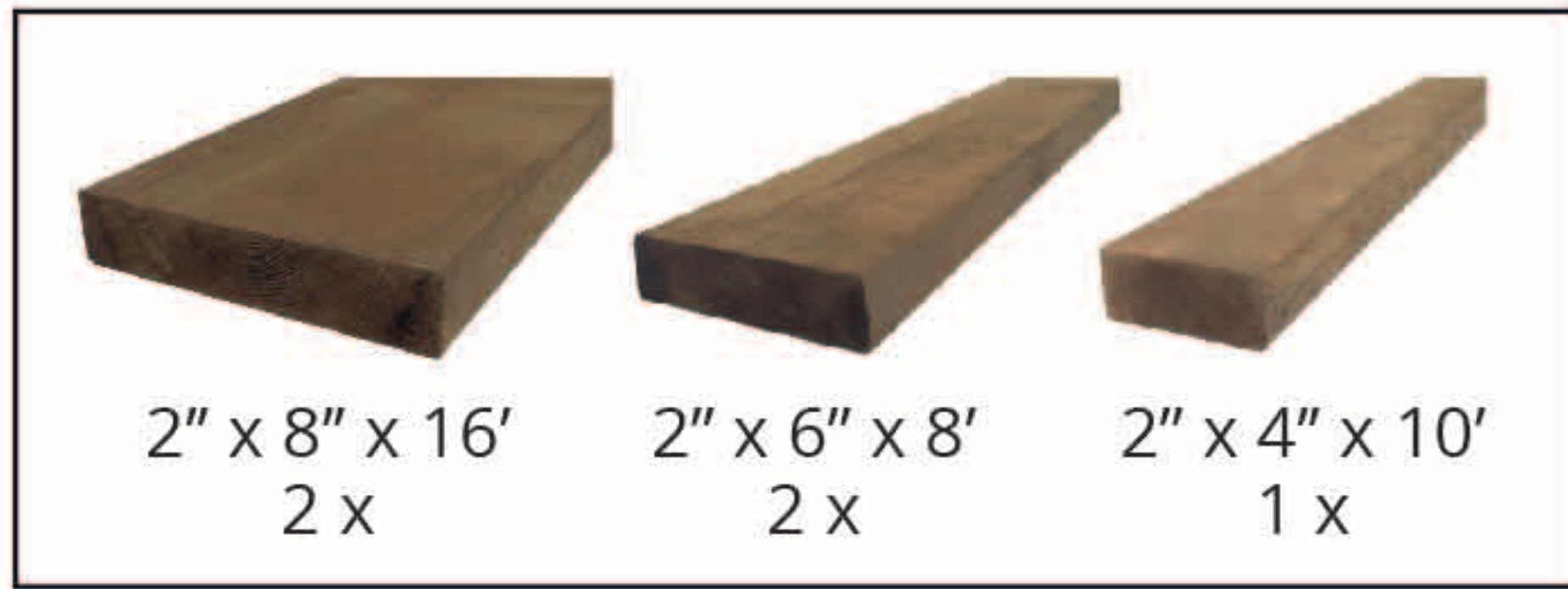
This set of wheels is one of the components to build a mooring ramp for small boats of up to 2500 lbs. This assembly sheet will guide you through the steps to complete this project.

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1-800-585-1237 or by email: info@multinautic.com

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STRUCTURE



TOOLS for the structure:

Miter saw or saw
Level
Tape measure
Square bit screwdriver

	Qty	Size	Length
Side beams	2	2" x 8"	192" (16')
End beam (for leg holders)*	1	2" x 6"	72" (6')*
Cross members*	5 or 6	2" x 6"	21"
Winch post	2	2" x 4"	29"
Diagonal winch post brace	1	2" x 4"	23"
Post brace strengthener	2	2" x 4"	6"
Wood screws	± 50	#10	3"

*Cross members and End beam length may slightly vary depending on boat width or type

We recommend to be 2 people to assemble and install this mooring ramp. The time required is estimated at 4 hrs.

As each boat has its own characteristics, some preparations will be necessary to adjust the suggested layout for your situation.

1- To evaluate the width of your ramp, measure the ideal location of the wheels under the hull. This dimension will be the same as your cross members.

For "V" shaped hulls, keep in mind that the greater the distance between the wheels, the lower the boat will be.

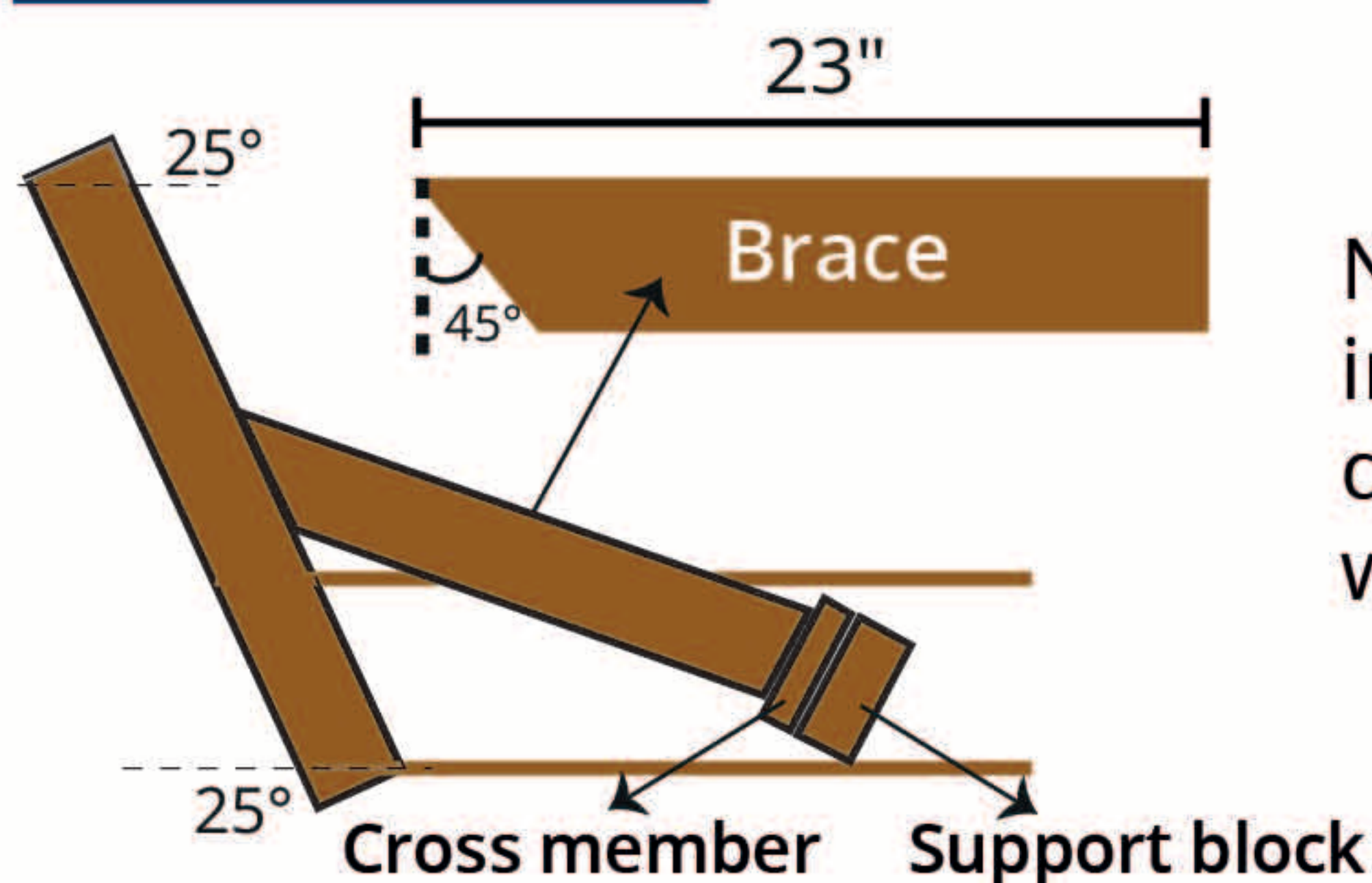
2- To make sure that your piles are straight, position the end of a 2" x 8" beam on the shore, where the ramp will be installed, and the other end 2 inches under water surface. Using a long level maintained straight, mark a cutting line. Mark the other end of the 2" x 8" at 25° for the installation of the winch. Copy those marks on the other beam and cut them.

3- Cut the 2" x 8" ends above the keel roller at 45° as shown.

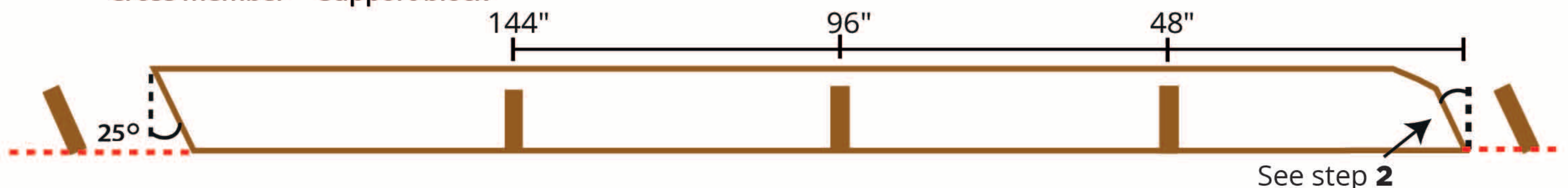
4- Assemble the structure with screws according to **Image A**. Be careful not to screw where the bolts will be.

5- To create the winch post, you can combine two lengths of 2" x 4" or one 4" x 4". The assembly of the brace with the cross beam can be done separately to then be connected to the structure and winch post. Screws some 2" x 4" or 2" x 6" support blocks at the rear of the winch's cross member.

Image A

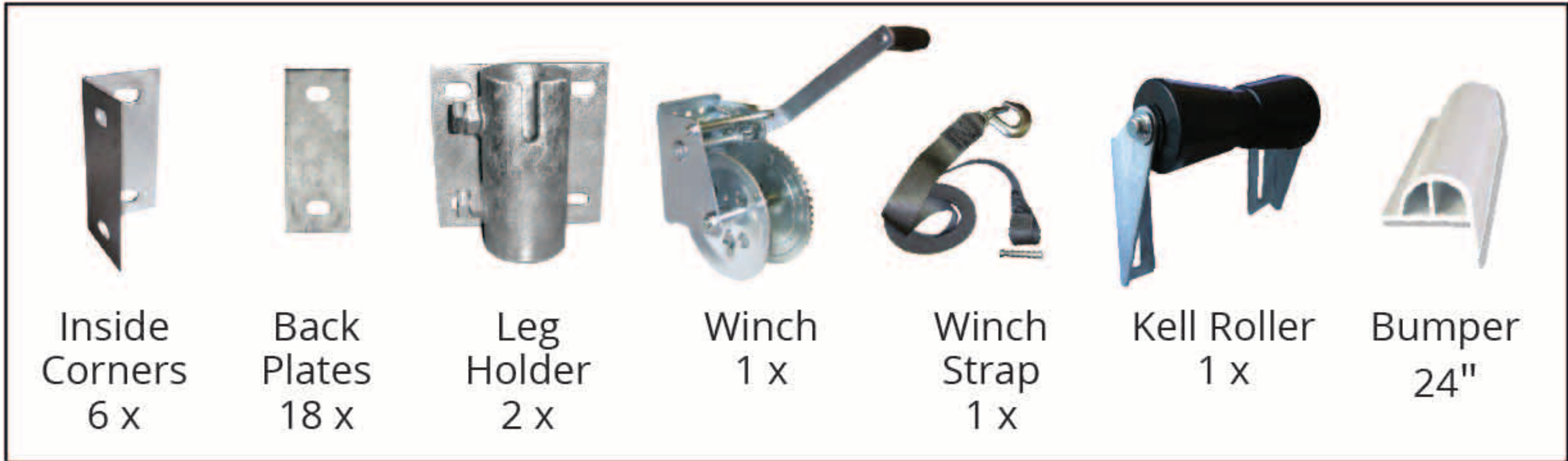


Note: The winch post can be installed inside or outside the wood frame depending on your needs. If you wish, you can cut the ends at 25°.





HARDWARE



TOOLS :
Pen
Drill
7/16" drill bit
Hammer
3/4" wrench
Tape measure
Screwdriver

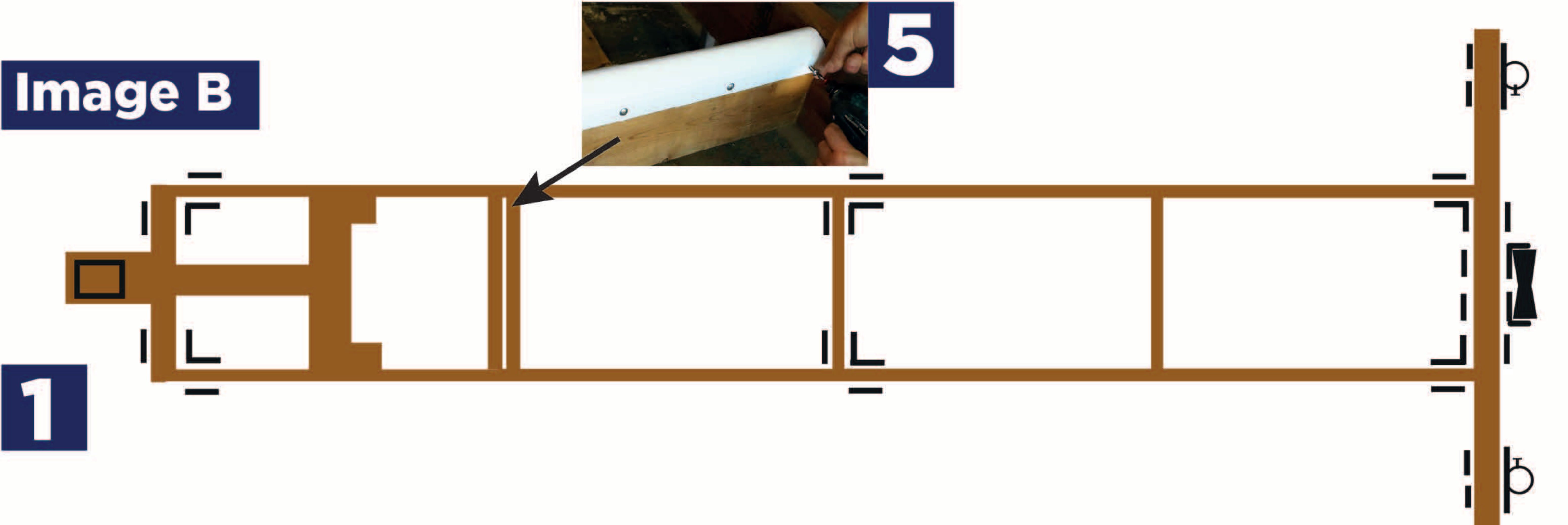
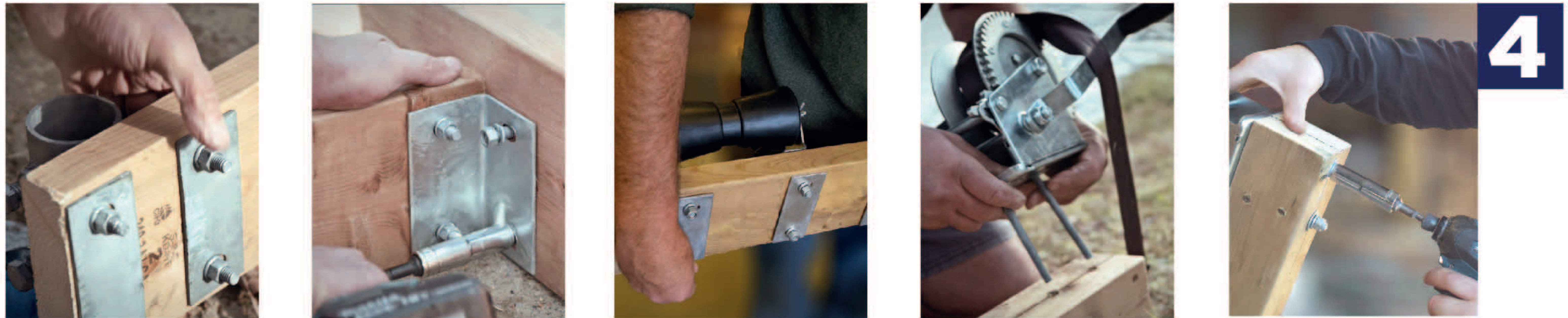
	Qty	Size	Length
Carriage bolts w/ nuts & lock washers*	36	3/8"	2 1/2"
Carriage bolts w/ nuts, lock & flat washers*	2	3/8"	4 1/2"
S.s. Truss head screws	6	#8	1"

* We recommend galvanized steel bolts



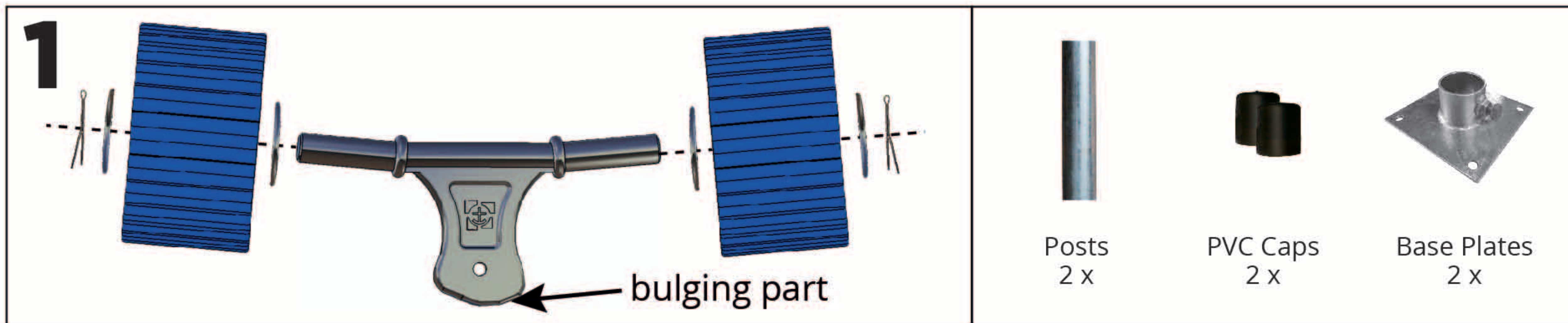
You can install the hardware once the entire structure is assembled with screws or pre-assemble some parts that you will connect later. The concept is the same:

- 1- Note the hardware locations according to **Image B**.
- 2- Position the hardware parts and mark the holes with a pen.
- 3- Drill holes with the 7/16" drill bit.
- 4- Install the components with the 3/8" x 2 1/2" bolts except for the winch bolts which are 4 1/2" long with flat washers.
- 5- Complete by screwing the bumper length that will protect the hull of your boat to the front. Note that the cross member could be doubled for better support.





WHEELS & INSTALLATION



TOOLS :
Tape measure
Pen
Screwdriver
7/16" & 3/4" Wrenches

1- Assemble the wheels as shown above with the flat washers and the pins.

2- Assemble the axle to the base. Locate the bulging part of the axle. This side will be placed toward the outer portion of the ramp. This curve allows to block the rocking movement so as to keep the wheels leaning inwards.

3- Position the wheels according to the distances proposed in **Image C**. A ramp with 3 pairs of wheels will support a 2000-lb boat, while 4 pairs of wheels will guide up to 2500 lbs.

4- Screw the wheel bases to the structure.

5- Slide the posts into the leg holders and slightly tight them temporarily with one of the hex bolts. Install the base plates at +/- 6" from the ends of the piles.

6- Move the ramp to its final location.

If the ramp floats, pound the posts more deeply in the ground for a better grip.

Depending on the quality of the terrain where the structure will be positioned, it may be wise to use larger bottom plates (#11108), or to add planks in the water under the base plates to prevent the piles from continually sinking.

If the ramp doesn't lay all the way on the bottom of the water plan, it's highly recommended to add a central support underneath if your watercraft weighs more that 2000 lbs.

To prevent ice damage, it is suggested that this ramp be removed from the water during the winter.



2



3



4

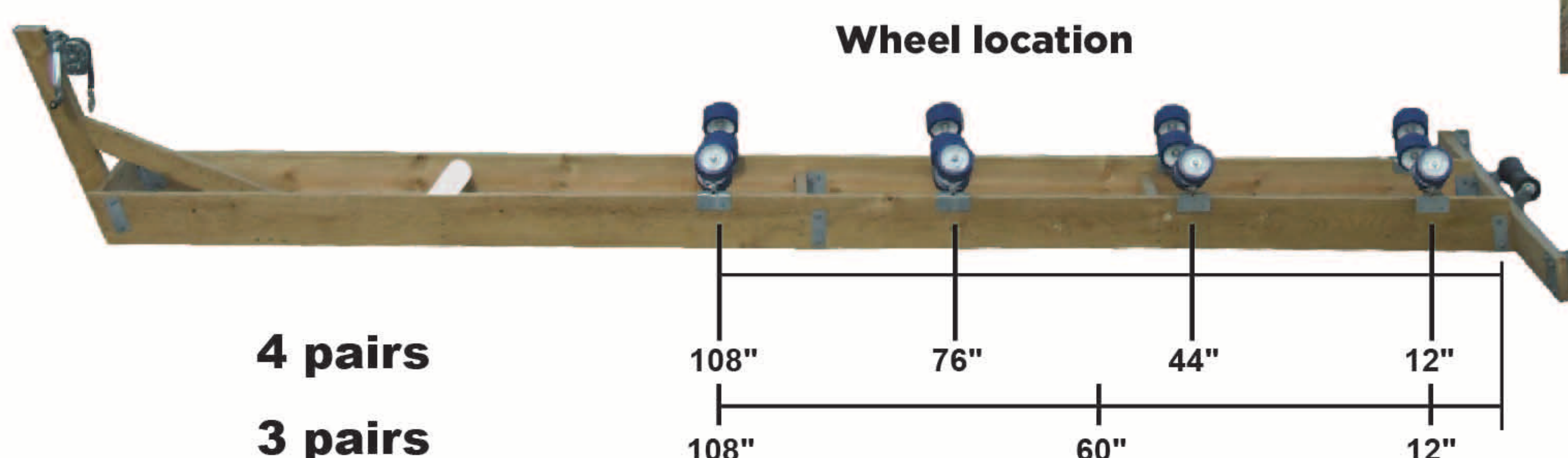


5



6

Image C



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