

SIDE MOTOR MOUNT **Alternate Mount and Location for a Trolling Motor**



Drawn 09-15-2013

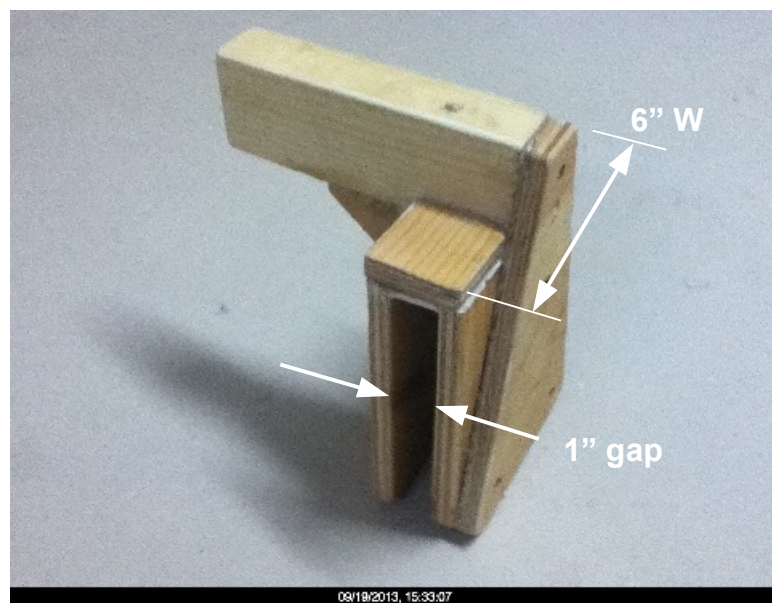
Rev. 09-21-2013

Print in Landscape Mode with 1/4 inch borders.

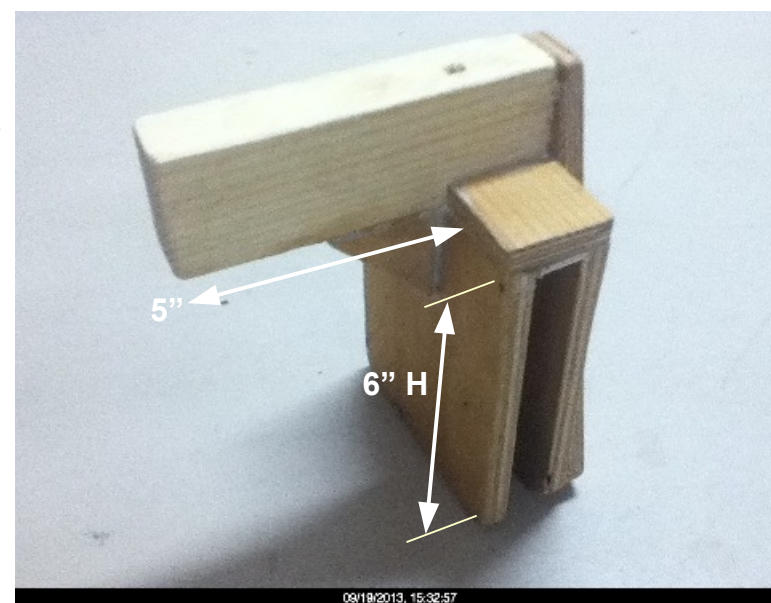
The primary purpose of locating the trolling motor next to the operator is ease of controls. The side location makes steering and changes of speed convenient, and requires no long steering extension arm or speed control box. This results in the deep cycle battery being re-located, possibly toward the opposite side of the hull, for balance. The design as shown is pretty much universal in scope, but the 1 inch gap for hull side panel clearance is boat specific. It should fit almost all my hull designs, as they all utilize a 1x2 rubrails, and 5 MM or 1/4" side panels.

The location of the mount on the hull is important. It needs to be at least 2/3rds back the length of the boat, or more. If it isn't, it will not steer properly. My water tests prove this out. Close to a bulkhead is advised, for strength. Depending on the boat, a short tiller extension may be necessary, but that is a small motor addition, easy to retrofit.

The other advantage to this design is that it can be applied to my canoe or kayak hull types, and allow their smooth water characteristics to be undisturbed, providing more efficient operation. Similar mounts can be developed to work with different style boats, and even rounded hulls. Not all designs would require a hole through the side panel.



The design of the Mount intentionally places the Motor close to the side of the Hull. This produces the smallest moment arm, which translates to less downward side force. The shift of battery location easily offsets this force, and produces a balanced boat.



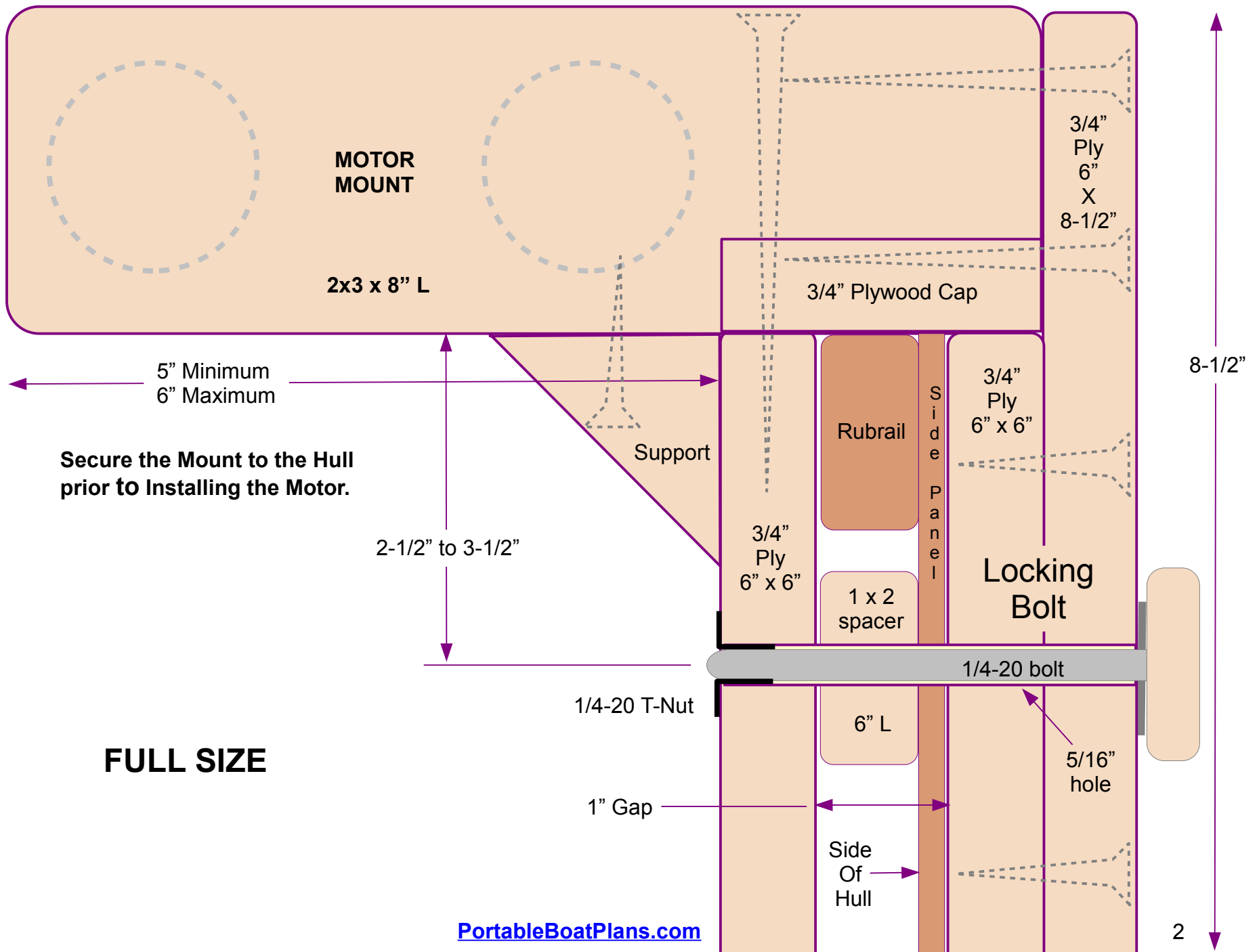
a ken simpson design

PortableBoatPlans.com

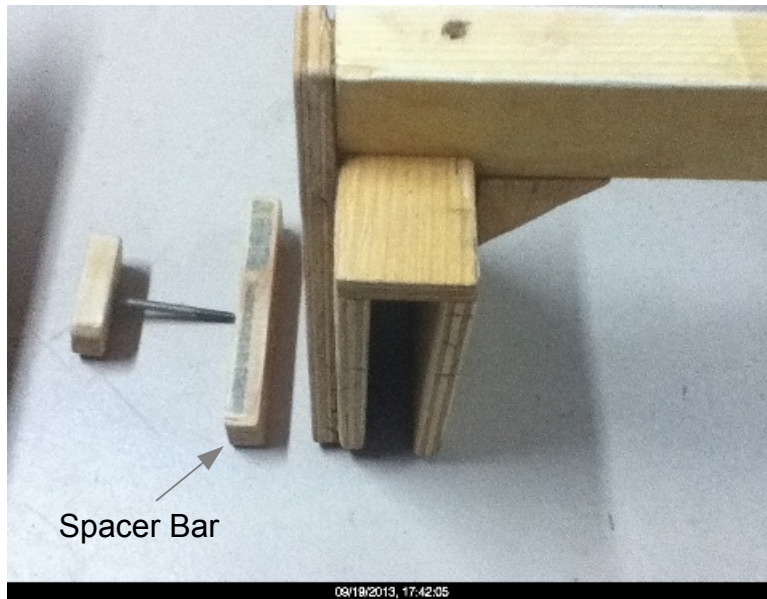
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Side Motor Mount Bracket



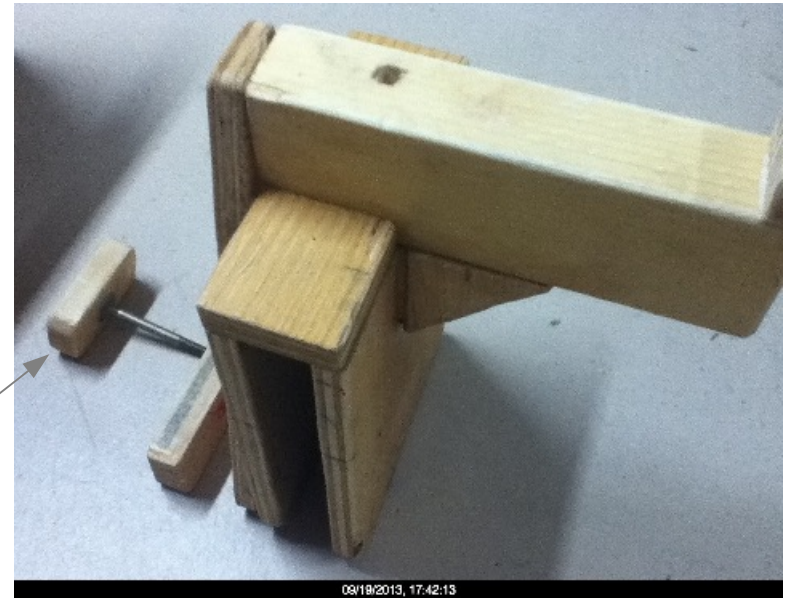
Side Motor Mount Bracket



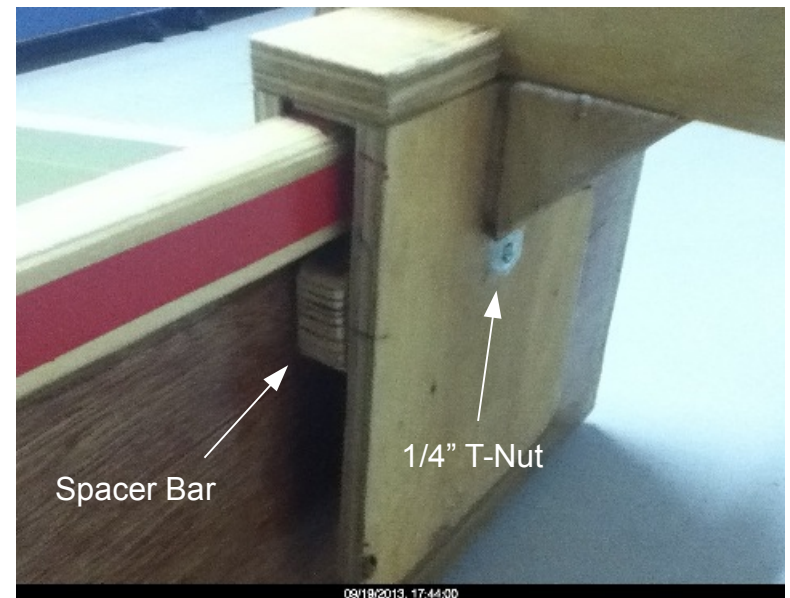
The finished mount with the spacer bar and locking bolt.

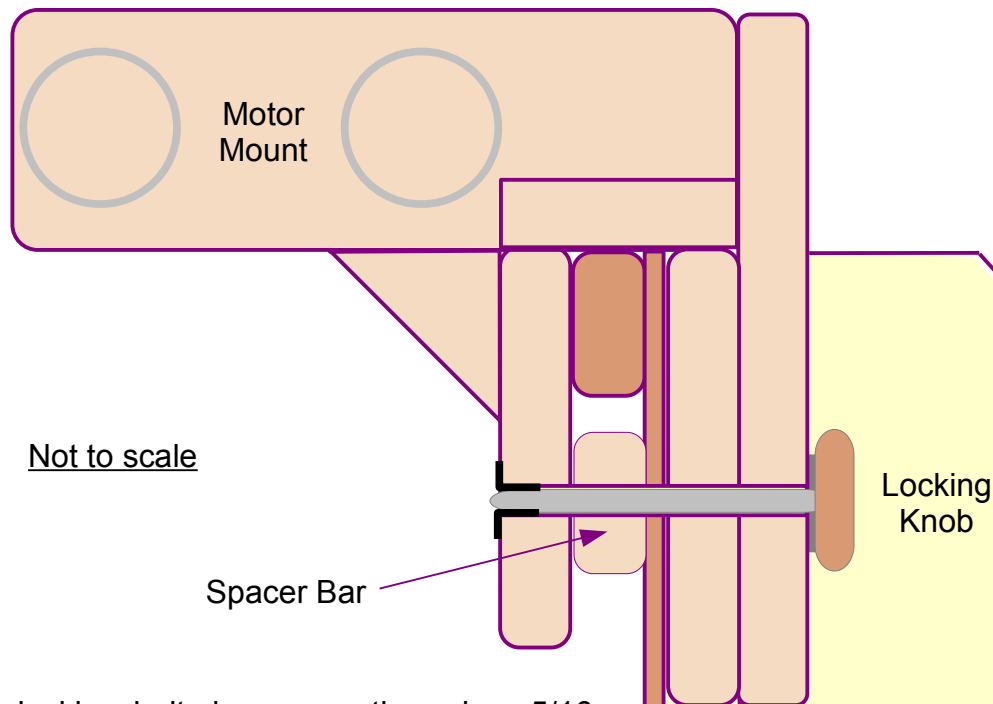
The spacer bar has a 3/8" hole on its center, to allow easy assembly.

Note also the knob of the locking bolt. This is made the same way as the hull assembly bolts. Free plans available on the website.



On this particular boat, the placement of the mount was reasonably close to the bulkhead. The bulkhead provides side panel stiffness, and as such, the mount will have little twisting effect on the hull. Placed further away from the bulkhead may require the application of inside panel stiffeners.





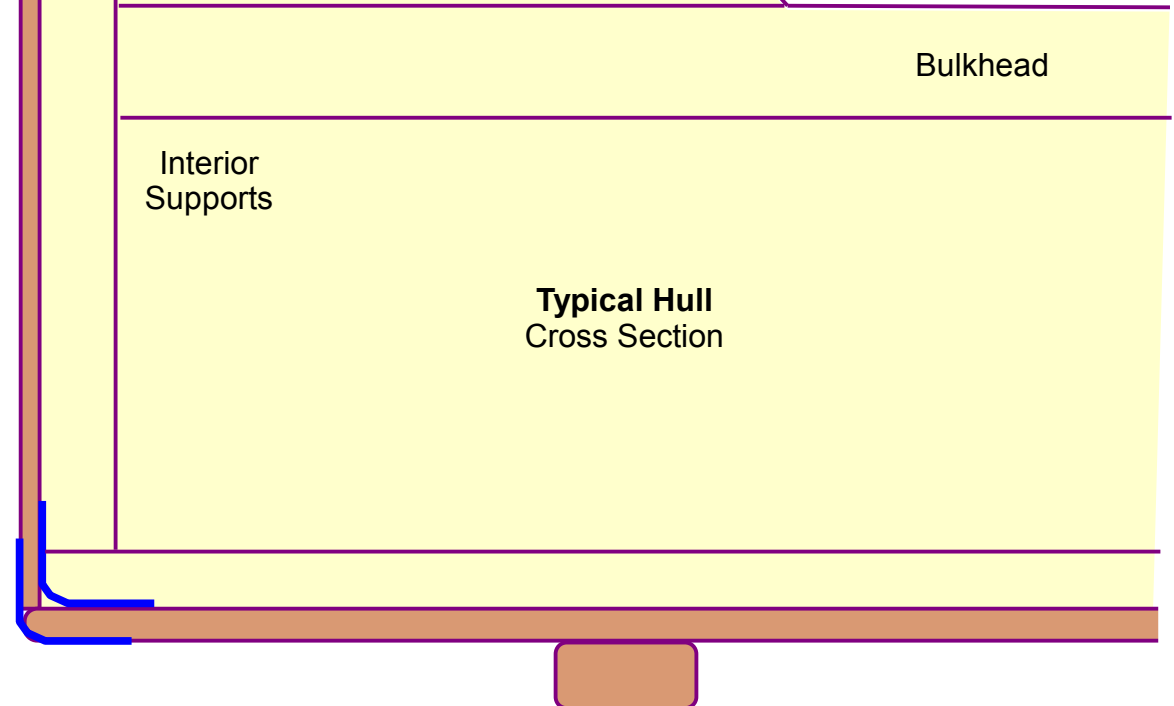
Side Motor Mount Bracket

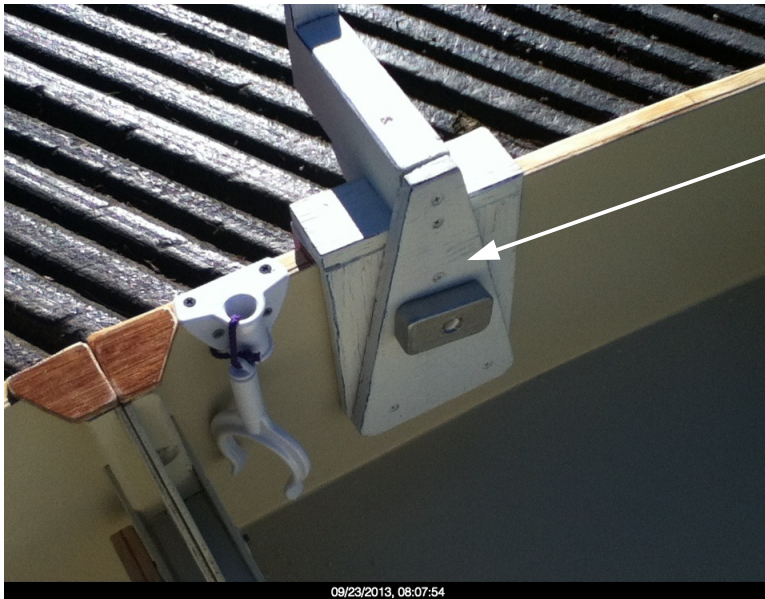
SET-UP: Place Motor Mount over the side of the hull, as shown, and seat on the rubrail. Align the hole in the Mount with the hole in the Side Panel. Place the Spacer Bar so that all holes line up. Insert the Locking Bolt all the way through, and thread into the T-Nut. Hand tighten.

You can now install the Trolling Motor onto the Motor Mount.

Note: The locking bolt does pass through a 5/16 inch hole in the side panel of the hull. It is well above the water line, and not a concern, even if the motor mount is not attached.

Also, the Mount should be located at least 2/3rds back towards the aft end of the boat, for best control. If more centered the motor will try to push the hull sideways when turning. Prior to drilling the hole in the hull, make sure the location is comfortable for you. This can best be done with you sitting in the boat, and the motor mounted, and hanging down, as if in the water. However, this can usually only occur when you are actually in the water. So, my suggestion is to take a 5/16 drill with you, and drill the final locking bolt hole in the hull after you are satisfied with the location. Do NOT attempt to run the motor without the bolt attached and tightened ! It is possible that you will have to add a short motor tiller extension. They are available at the local sporting good store, or you can easily make one yourself, as I did.





The Mount secured to the side of the hull. Note the nearby bulkhead.

The Motor mounted and placed in position for launching off the ramp. Also note the position of the motor relative to the aft of the boat.

The boat is the 11 foot QUAD.

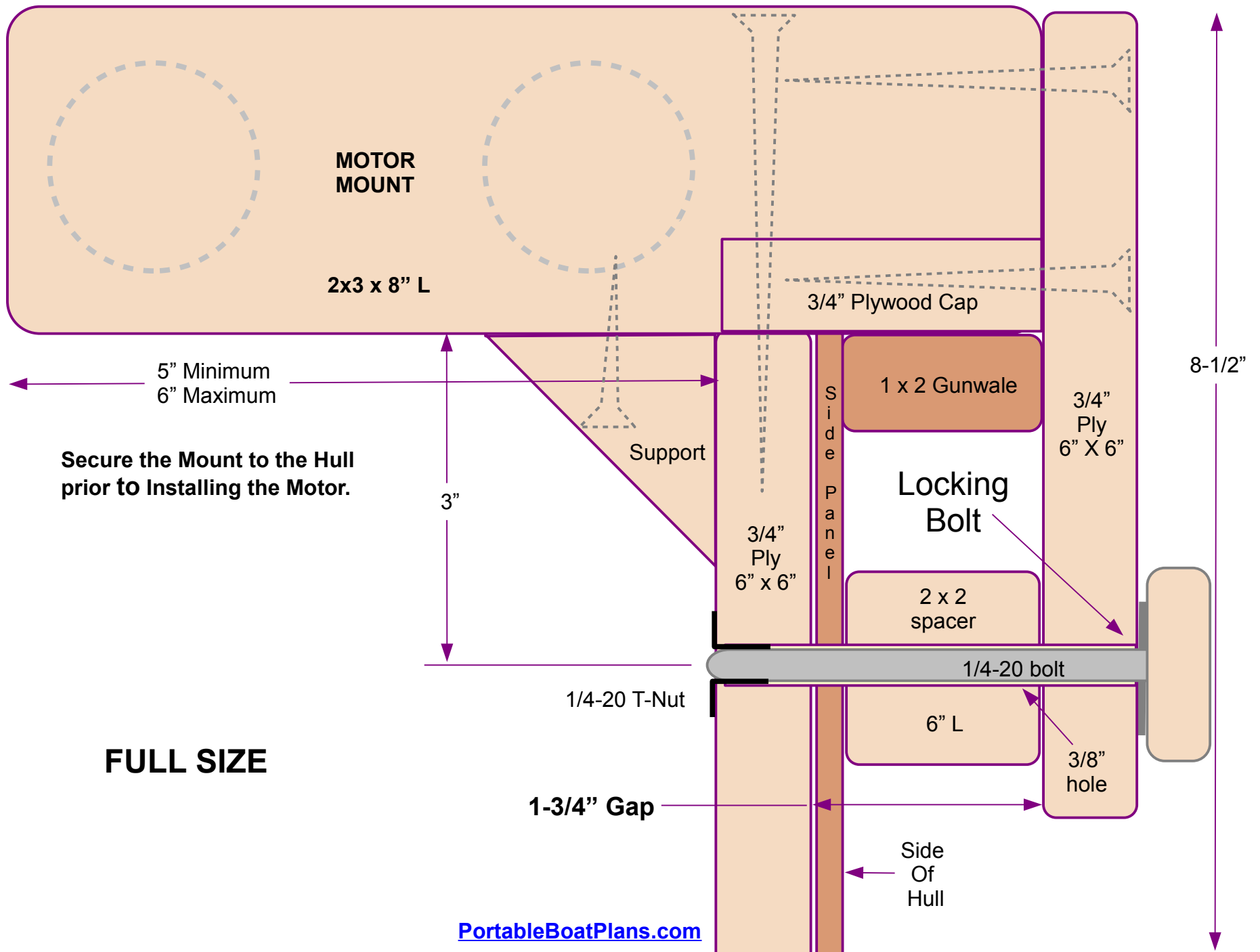


Under full power, and no noticeable flex of the hull. It's a good idea to slightly tighten the locking collar on the motor shaft, to prevent the motor from wandering, and allowing hand's free cruising..

That's me enjoying this great day on Lake Saguaro.



Side Motor Mount Bracket, 1-34" Gunwale Type



Side Motor Mount Bracket, Non-Through Hull, 1-3/4" Gunwale Type

