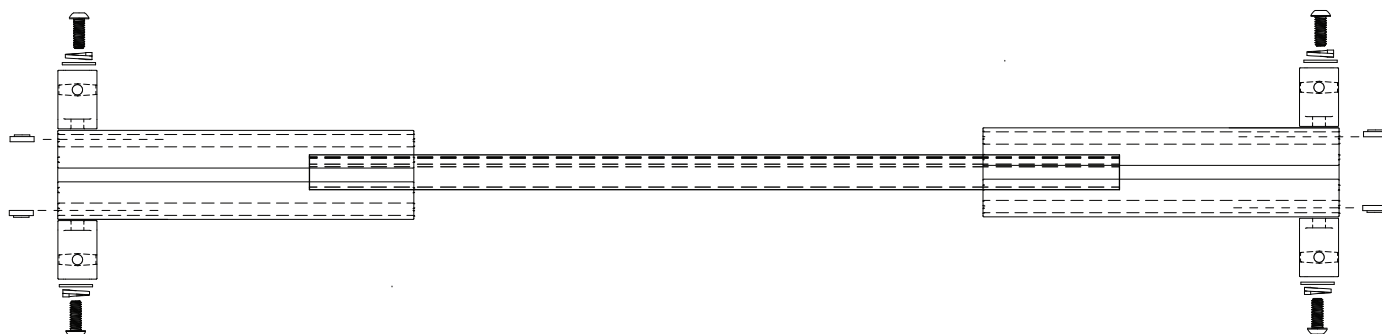




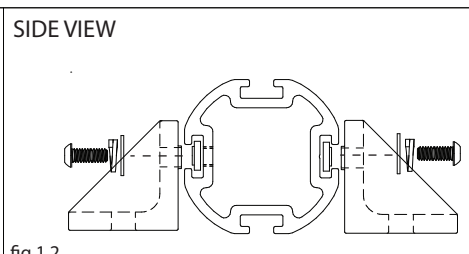
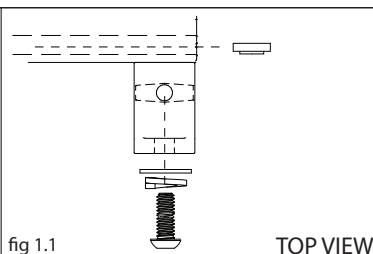
GROOVY LANDING GEAR-SHOALIE

INSTALLATION INSTRUCTIONS

1. Loosely (hand tight) assemble the Knuckle subassembly for each side of the Groovy Landing Gear, link with crossbar extrusion and dry fit to your kayak.

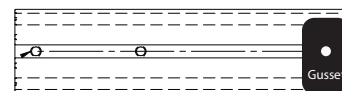


1a. For each gusset, slide 1 weld nut into the groove of the knuckle and attach using a flat washer, lock washer and 1/4- 20 button cap screw. The 2 holes in the knuckle should be to the inside and facing the rear of the boat. These will be used to lock the crossbar into place. fig 1.3

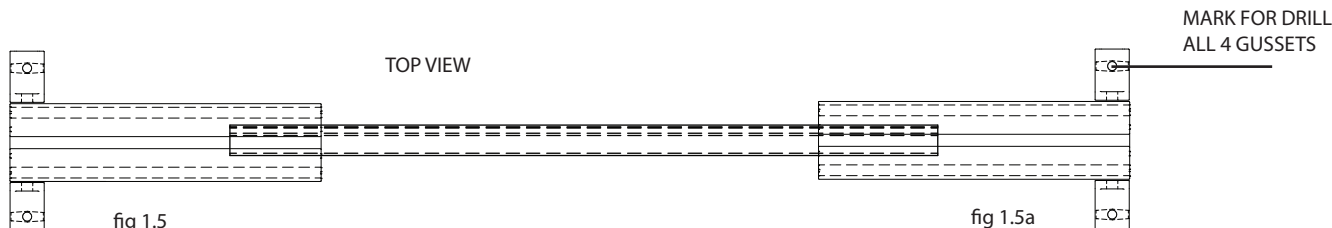


1b. Slide the spacer bar, groove up, into the knuckle, about 1/2" past the outer set screw hole, and fasten the outer screw. Slide the other end through the opposite knuckle. This side may go far beyond the outer hole, but that's fine for now. fig 1.4 (SPACER BAR WILL BE CUT TO CORRECT SIZE LATER)

fig 1.3



1c. With one knuckle locked into place by the set screw, allow the opposite side to move along the cross bar enough to fit the subassembly to the ideal mounting location for your kayak (will vary) Once you have this set, use the larger holes in the gussets to mark where you will drill your hull. fig 1.5
The Crescent Shoalie has a designated spot for installation.





GROOVY LANDING GEAR-SHOALIE

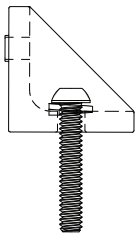
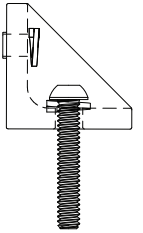
INSTALLATION INSTRUCTIONS

2. Check that the marks align with the stainless backing plates and drill with a 3/8 drill bit.

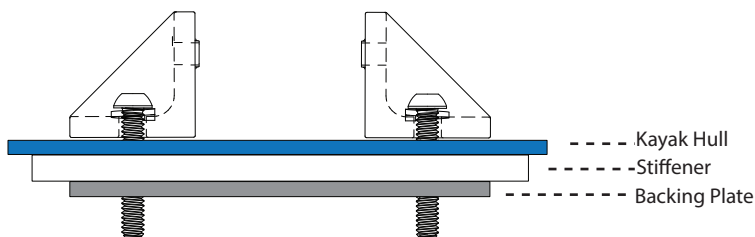
3. Use paper or masking tape to create a pattern for the UHMW plastic stiffeners. ***DO NOT LEAVE THESE OUT.** The stiffeners should cover as much area on the underside of the kayak as possible and while still flat against the hull. If there are any areas that are recessed from the top, they will protrude on the underside and need to be cut around. With the pattern laying or taped in place, put the knuckle assembly back into the designated spot, and mark the holes for the stiffener.

Place the pattern onto the plastic stiffener, mark with a permanent marker, drill the holes with a 3/8 drill bit, and cut with a band saw or jigsaw.

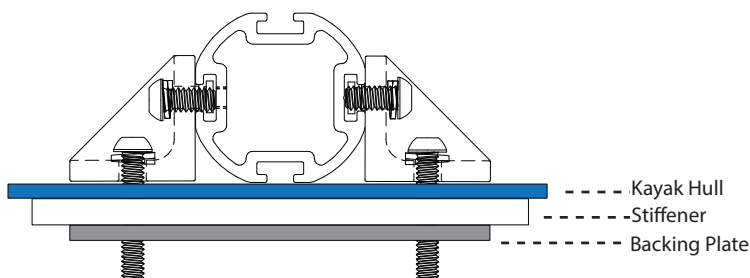
4. Assemble the gusset packs with 5/16-18 stainless bolt and 5/16 lock washer



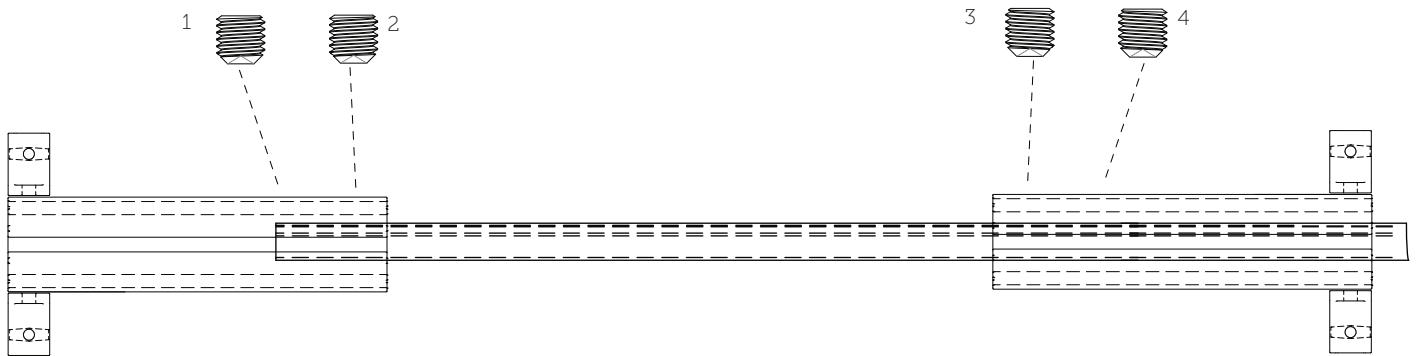
5. Reach the backing plate and stiffener into the hull via the hatch in the back of the kayak. Make sure the plate is stacked on TOP of the backing plate. Align the holes in both the backing plate and stiffener with the holes that were drilled in the hull and fasten, using the gusset assembly. Be sure to keep the gusset and lock washer on the bolt, so you don't have to do it twice.



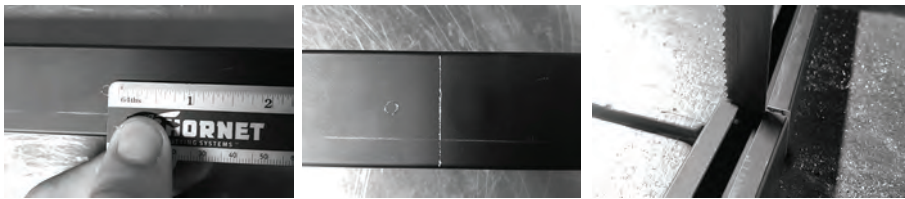
6. Pre-assemble the 1/4-20 screw, track nut, flat washer and lock washer, then slide the groovy knuckle into place, with a track nut inside each groove. *** FAILURE TO USE BOTH WASHER WILL RESULT IN DAMAGE TO THE KNUCKLE AND/OR VIBRATION CAUSING THE SCREWS TO BACK OUT. BOONEDOX DOES NOT COVER THESE USER ERRORS UNDER OUR WARRANTY.**



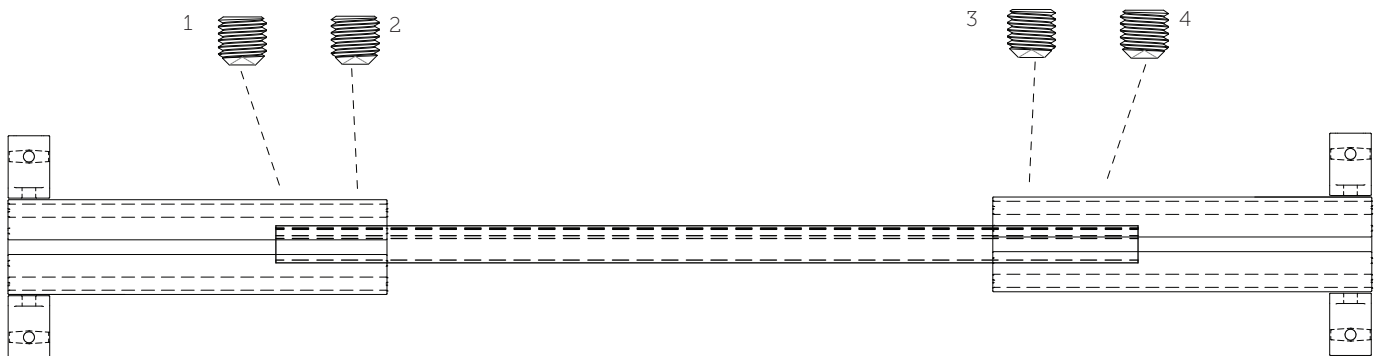
7a. With the knuckles fastened, slide the spacer bar through one knuckle then the other, until the end of the spacer bar has about 1/2" overhang on the outermost set screw hole (1) (these holes should be facing the rear of the kayak) The other end of the spacer bar will be too long at this point. Tighten set screw (4) to make a mark for cutting the spacer bar to length.



7b. Measure 1/2" towards the end of the spacer bar, from the mark made by tightening the set screw, mark a line and cut with a band saw, jigsaw, or hacksaw.



7c. Replace the spacer bar, and align it with each end about 1/2" past the outermost hole (1) & (4) then tighten all 4 set screws



8. 10. To mount the WHEELS to the LEGS, insert the inner WIRE LOCK PIN and close the wire. Mount the WHEEL. Insert the outer WIRE LOCK PIN and close. Repeat for the other leg/wheel.



11. Insert the square tube of the Groovy Landing Gear Leg into the knuckle extrusion with the legs angled toward the rear of the kayak when in the down position.

USAGE NOTES:

- Never store your kayak with the wheels down for long periods of time
- Always transport your kayak with the legs stowed in the vehicle or kayak when the option is available.



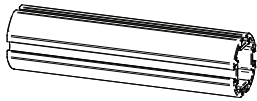
GROOVY LANDING GEAR-SHOALIE

TOOLS NEEDED

- Set of Standard Allen Wrenches • Cordless Drill • 3/8 Drill Bit
- Hacksaw for Cutting Spacer Bar • Jigsaw for Cutting Plastic Stiffeners
- Rigging Kit (included) • Permanent Marker • Masking Tape

PARTS LIST

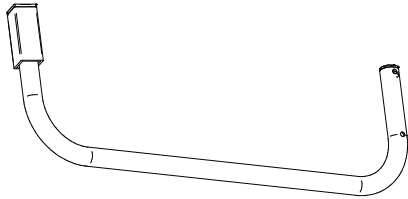
KNUCKLE- 2



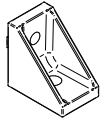
CROSS BAR- 1



LEG- 2



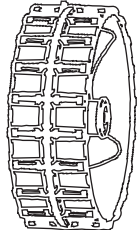
GUSSET- 4



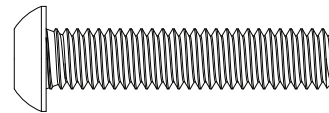
WIRE LOCK PIN- 4



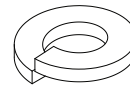
KIWI WHEEL- 2



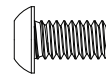
BACKING PLATE- 2



A- .3125 BOLT- 4



B- .3125 LOCK WASHER- 4



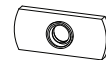
C- .25 BUTTON CAP SCREW- 4



D- .25 FLAT WASHER- 4



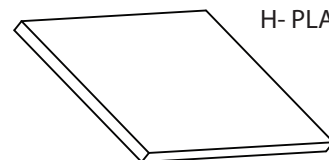
E- .25 LOCK WASHER- 4



F- .25 FLAT WELD NUT- 4



G- .25- 28 SET SCREW- 4



H- PLASTIC STIFFENER- 2