

Assignment: Structural inspection with email report.

Vessel: 1997 Sea Ray 580 Super Sport

Hull ID #: SERY0296A797

Documentation #: No. 1055719

Vessel Name: Knot 4 - U

Date of Inspection: 04-18-24

The vessel was sounded with the Tramex Skipper Plus moisture meter. The scale on the meter reads. low, medium, higher, high. The vessel was also hammer tested with a screwdriver handle.

Hull Bottom.

The aft half of the boat read higher moisture present at the centerline going outboard 6' and medium / higher to the hull bottom edge the 1st third of the boat from aft. Going forward the hull bottom read medium moisture 2/3rds forward. Hull bottom hammer tested sound where tested.

The raw water intake scoops for the engines are damaged with fins missing and both need to be replaced. The shafts, struts and rudders are corroded from salt water with some dried barnacle fragments on them. The cutlass bearings are older and should be replaced.

Transom, below the waterline.

The lower outboard sides of the transom recorded medium / higher by the trim tab blades and medium moisture by the cylinders. The lower part of the transom recorded higher moisture present. Areas hammer tested sound where tested. The transom zinc plate and the trim tab blade zincs are new.

Hull Sides.

The starboard hull side recorded medium to higher around the exhaust port. Cracking observed around the exhaust port and should be repaired.

The upper part of the hull side above the style line recorded high moisture present approx. 8' from the transom going forward another 5'.

High moisture was also recorded aft of the forward hull side vent going all the way forward to the bow V, approx. 15+'. The upper part of the vessel could not be hammer tested due to the shrink wrap being on the vessel. There is a small crazed area in the starboard amidship hull with uneven gel tones at the crazed area. Repair. The port upper hull side forward by the vent recorded higher moisture present approx. 4+'. The port aft hull side shows a repair present. There is high moisture in the core going from the transom corner going forward 17+' at the waterline and angling back up to the rub rail going back to the transom

14+'. The area did hammer test sound, but the core needs to be dried out to avoid decay of the balsa core. Cracking observed around the port exhaust. Repair area.

Hull Interior, mid cabin and forward

The stringers and the bilge sole at the forward V entry and in the salon area had No elevated moisture present and hammer tested sound where there are access hatch covers. The centerline mid cabin bilge at entryway recorded medium / higher moisture at the inboard stringer.

Stringer hammer tested sound. The sub floor sole here recorded higher moisture present aft of the shower sump pump. Area hammer tested sound.

The aft bulkhead in the same hold recorded high moisture present with uneven tones observed when hammer testing. Bulkhead will need to be replaced at some point. The 4 portholes in the salon show water intrusion at the lower windows. check seals. There is water intrusion going down the port forward

galley wall. Find Cause and repair. The interior is dirty with a mildew film on everything. The interior needs to be professionally cleaned.

Engine room.

The forward engine room lower bulkhead recorded high moisture present with uneven tone observed when hammer testing. The port and starboard inboard stringers recorded higher moisture from the forward engine room bulkhead to the transom, with the starboard forward stringer reading high moisture present. The inboard stringers hammer tested sound. The port outboard stringer recorded high moisture present with delam observed from the transom going forward approx 8' with weeping observed.

Stringer is in need of replacement. The starboard outboard stringer recorded higher moisture and hammer tested sound where accessible. The outboard sub shelf supports recorded high moisture on the starboard side with some separation of the glass observed on the thwart that ties into the stringer. The port side recorded high aft and higher forward. The stringers should have core samples to check the integrity of the wood and dried repaired as necessary. The starboard outboard stringer needs to be replaced. Rudder gland packings, sea strainers, ground blocks are all corroded green from salt water exposure. Some metals are rusty from the same and all need to be cleaned and rusty metals painted. Centerline bilge is dirty and needs to be cleaned.

Cockpit.

The step up area at the helm entry recorded high moisture present with delam in the sole when hammer testing. The upper helm sole recorded higher moisture present with high moisture aft of the helm seat. Uneven tones were observed aft of the helm seat. High moisture present at the salon entry sole. Uneven tone observed here. Port sole forward of the ice maker going to starboard past the back facing seat base to the starboard forward 10" deck plate recorded various levels of higher to high moisture present. Areas hammer tested sound. The port isle going to the swim platform recorded higher forward and high moisture aft with uneven tones aft. The port aft hatch cover recorded higher moisture around the hatch cover lift rings. Areas hammer tested sound. The port aft hatch cover recorded higher moisture around the forward lift ring, Cracking observed in the cockpit sole at the starboard boarding step base. The sun pad recorded high moisture present forward of the hinges with higher moisture present aft. The gel coat is chipped and void exposing the fiberglass. Repair gel. The areas listed above with moisture should be dried and repaired where uneven tones / delam are observed.

Hardtop.

The aft hardtop supports are currently being worked on. The lower part of both frames recorded higher moisture with medium moisture toward the top of frames. The plexi glass frames are missing in areas and need to be rebuilt. There is a crack in the forward port hard top that has been filled that recorded high moisture present of the under side by repair.

The starboard side also has a crack with a repair started and recorded medium moisture. Dry hardtop and finish repairs. The top of the hard top could not be inspected due to the shrink wrap on the vessel.

Topsides.

The forward bow deck by the windlass recorded high moisture to the starboard side of the windlass to hatch cover, and higher moisture by the foot controls. Areas hammer tested sound. Anchor locker and impact bulkhead all appear sound. High moisture was recorded in the deck forward of the forward hatch cover going to starboard to the forward grab rail base going forward down the brow. Area hammer tested sound.

Crazing observed in the starboard forward toe rail approx. 7' long. The starboard deck brow from the starboard grab rail base forward, going aft approx 7' recorded high moisture on the top to the round of the brow.

Higher moisture was recorded on the port side deck brow from the grab rails to the brow aft of the forward hatch cover going aft approx 6'.

The port aft gunnel at the aft bow rail stanchion base recorded high moisture present. Area hammer tested sound. There was approx 12' port and starboard of the gunnels that could not be inspected by the side windshield because of the shrink wrap. There were also 2 areas on the bow fore deck where the gunnel couldn't be inspected due to rain water / shrink wrap laying on the deck / gunnel. Remove water so damage does not bend bow rail. Areas with moisture should be dried and bases sealed with Life Seal to avoid moisture entry.

Swim platform.

There are several areas visible where the platform has started to be repaired. The center top side of the platform has high moisture present with delam and is soft to the foot when walked upon. There is higher moisture and delam present just to the right of the port cockpit entry with medium moisture on the port platform corner. Higher moisture was recorded in the starboard platform sole at the starboard side cockpit entry. The underside support frames and starboard backing support recorded up to high levels in the support frames. Areas hammer tested sound.

Let me know if you have any questions.

Thank you, Capt. Mark

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