

Cal 25 Common Problems and Solutions

Deck is soft

A solid deck should not give when you walk on it; however, many boats of this age (especially those that have been neglected) require that the plywood roof be replaced. This is a several day process. Click on the [Mast Beam Repair 2](#) link for more information.

I just replaced the entire deck from rear hatch up to one foot forward of forward bulk head. I also replaced the beam. The entire job was done from within the cabin underneath the deck. I tore out the half inch ply wood in the ceiling, and the beam. I used a shingle scraper to remove stubborn ply wood areas. I made a pattern for new ply wood, cut ply wood and dry fitted (propped up with 2x4 braces), then used a fiber glass similar to west system. The beam was made without a jig, and by using advice from this website. After the ply wood was glued in with the fiber glass, I slipped the beam in, glassed in all corners of ply wood where it meets the walls, the forward bulk head and also where it meets the beam. I'm planning to cover the ply wood with 1/4 in. laun for appearance.

This project took many hours, and really was a lot of work. Don't let anyone tell you differently. Not that I'm trying discourage anyone from tackling this common Cal 25 problem, but contrary to other people's comments on this sight, this was no easy task. Messy and many hours, and I do similar work every day. Good luck to anyone taking this on, and I'm happy to give some advice.

Beam is sagging

Boats with rotting roofs often need new beams at the same time. This may sound worse than it actually is. Some owners have a jig to laminate new beams. Many have added small amounts of carbon fiber in the hopes of adding strength. Click on the MAST BASE REPAIR 2 tab for more info...

Always remove the rudder when pulling your boat out for the winter! Water will collect in the rudder post, freeze, and crack. Still in search of a good solution- you can buy new ones from Steve Brown at [Finco Fabrications](#).

Hairline vertical cracks near the bulkhead

The bulkheads are pulling away from the hull. This is a common problem. On both sets of forward bulkhead, grind the area clean, apply a West System Coagulant filler, followed by strips of fiberglass to reinforce the attachments. Some people have reported that heavier weaves last longer, but are harder to work with. One of the pictures in the original sales brochure (Available from the main page) shows these joints as they were originally assembled.

The keel seems to have movement

Some boats in Longbeach CA have stiffed the keels, make sure you do it in a way that complies with the National Racing rules ← *Important*

There seems to be a gap between the keel weight and the keel fiberglass

This occurs mostly with the 1960s Cal25s. The wood shims between the lead and the fiberglass has disintegrated and often the fiberglass will pucker in. Structurally this is not a problem. According to Steve Bandy (Cal25 racing god), you need to add layers of glass (like a relief map) to build up the glass until the keel is straight (not concave). I race and I still have not 'fixed' mine and still have plenty of speed.

Windows Leak

Replace the with new ABS plastic ones from 'Mark Plastics' in California. Cost between \$350 and \$700 depending if a few people were able to make a bulk purchase- All the CAL25 that have used this style window have had good results. Replacement is reasonable easy- I just replaced mine this weekend. I recommend a 1" to 2" diameter drum sander for an electric drill to help open up the openings. Also, a bbq scraper works good to remove the old layers of sealant.

Rub Rails fall off

Replacement is usually recommended. A few screws from the underside of the rub rail may help. See the links page for a company that sells the rub railing

Electrical System is unreliable

The boats had an extremely primitive 'optional' electrical system. Many Cal25 have had years of splices, twisted wire connections, speaker (or other thin type) wire for power, and corroded terminals. This is dangerous! The wiring in a boat should be 10 times the size of regular house wiring- this means that most wires to low power instruments (not VHF radios, coffee pots, search lights, etc) should use either #14AWG or #16AWG wire. Replace the fuse panel, adding

a brass 'buss bar', and add a cutoff switch. Normally the wire from/to the battery, mast lights, and some of the other original wiring is ok- the instruments and lights added over the years usually need to be updated. Total cost should be about \$200 and should take one long day.

No holding Tank

Cal25s did not come with holding tanks-Yet many local jurisdictions (police not coast guard) are requiring the modifications. Two choices: 1) replace the head with a portable (port-a-poti) unit. They work good, simple, small, etc. 2) Add a proper holding tank. Add the holding tank in the Vberth area between the two compartment hatches. Use 1/2" or 3/4" oak to create a frame to support the 3 or 6 gallon plastic holding tank (watch that it has 2 large openings and 1 small for the vent) as high as possible in this area. Screw two lengthwise members between the two bulkheads. Use a heavy duty (black) rubber strap to hold the tank in place. Use a hold saw to drill a fill/pump out fitting(same as a marine gas filler throughhole) in the aft corner of the Vberth and another hole in the opposite aft corner for the vent. A small vent in the corner will not create a major lump for those sleeping. Finally, add Y valve and the necessary hose. The hole project will take about 5 hours realistically + at least 2 trips to the marine store for more parts. P.S. I love my Porto-pottie. I use the West Marine head treatment and it's easy to dump in any toilet.

Halyards do not run smooth

Most likely the sheaves are either cracked or seized- the old ones were made of inferior composites. Unfortunately, they are a non-standard size. You can either sand down thickener ones (as some have done) or you can have ones custom made. At least two boats have gone the custom route and in both cases it was cheaper than even unmodified off-the-shelf (contact Alex or Paul and Maritime Plastics 410-263-4424 they will need the old ones for a pattern). One set was made of aluminum, I had mine made out of Delrin with Oil-lite bushing- both work great. This job is best done with the mast down.

General comments from Dave

- Cal 25's were built to the state of the art of the 1960's, hand (not chopper-gun thank God..) layup with a very rich resin schedule. You will never have to worry about a rotten core with the boat. The Cals (all glass boats) will develop blisters below the waterline but these are easily repairable each time you paint the bottom and are not of much concern. They're like weeds, you get rid of them one year and new ones appear next year...
- Regarding seeing light thru the waterline paint; if the boat is original (no bottom jobs, no painting, fiberglass work, etc.) then the color at the waterline is the factory gelcoat. Seeing light thru it sounds rare but should not be a problem. After many years of grinding

out blisters and faring the keel on my boat, I could see lots of light where the factory gelcoat was sanded away. This isn't a problem if the glass work is up to spec. It is just the natural tendency for the glass fibers to transmit light.

- As far as a manual for the boat goes, I have an original mimeographed book that came from the factory. Sailable information contained in this was: It is a sailboat. It has a mast. Don't drill holes in the bottom while it is in the water... Bottom line, no information at all.
- Regarding paints. I'm assuming that you will be using a standard anti-fouling bottom paint on the hull below the waterline. It sounds as though you are planning on repainting the hull. If so, you will want to use some sort of 2 part epoxy paint system such as 'Awlgrip'. This is generally sprayed on professionally (it is EXTREMELY toxic and requires breathing apparatus) and requires LOTS of hull preparation work (read: faring, sanding, faring, sanding, faring, sanding... till you're sick of it) in order to look decent. In my opinion, it is not worth the time or expense on a Cal 25. The hull on a Cal is not very fair, lots of high and low spots. Also, the glasswork tends to have a lot of print-thru which will show as soon as any glossy paint is applied. You may wish to do what I did with my second boat, a 1970 Islander 37, neglected and abandoned for 6 years which I purchased thru an estate sale; (sound familiar?). The hull was the original white gelcoat which had never seen any wax or maintenance since it left the factory in 70, it was chalky and riddled with surface cracks. I bought a Sawzall professional buffer, two wool buffing pads, heavy, medium and fine polishing compounds and compounded the hull in that order. After using the buffer to apply two coats of wax, the hull looked like it came from the factory. The best \$250 (and 1 week of sweat) I ever spent.