

# **Wrestles with Anui**

**The first six months of work**



It is a lot of work... but it is all worth it!

When you buy a second hand boat, you have to expect you will need to attend to some repairs and maintenance. Every boat we have owned had its teething problems at the start, either because it needed TLC or we wanted to change things to suit our cruising needs.

This was particularly the case with Anui, our fourth catamaran. After all, she is an older lady: she was launched in 2000. She also sat on the hard stand at Boat Works for at least 18 months, baking in the hot sun, waiting for a buyer to fall in love with her. Boats need constant attention. They like to be used. If they stay unattended, many things deteriorate. So we were aware there would be some work and had budgeted for it, but just how much work is what got a bit disappointing.

It is said that you often have to spend about 10% of the purchase price in repairs and maintenance on a second hand boat when you first acquire it. We spent very close to that. It is also said that you spend the first six months ironing things out. It took five months of unrelenting work on Anui for us to feel ready to go. Having purchased this vessel, we were committed; we had to get through whatever was thrown at us. Anui is our home, all systems must be reliable and the boat has to be safe.

Although we had a few nice little sails and a shakedown cruise from the Gold Coast to Port Macquarie and back, it is not until May 2019 that things felt a little more under control. Between 1 December 2018 when we purchased her, and May 2019 we sailed Anui enough to get a feel for her capability and we lived aboard in that period so we knew she was extremely comfortable. But there were times when we felt rather deflated with the long list of repairs and upgrades, some of which we had not expected.

There is one thing worse than seeing your cruising plans thwarted, your marina and repair costs escalate and wondering whether you will ever get away, and that is having a disaster occur out on the reef or in a remote area where no help is at hand. Just image the mast coming down under sail, or the engines leaving you stranded in the middle of nowhere, or running out of power, or having a fire on board... Just think of how scared you'd feel, how dangerous it would be. So we are grateful for small mercies! All of our discoveries occurred when we were still in Southern Queensland, with access to marinas and professional marine engineers.

It is undeniable that you feel concerned when a growing list of problems stops you from getting underway and this seeds doubts in your mind. A little voice inside us did whisper "have we bought a dud?" But every time we sailed her, whether in feather-light zephyrs or more rowdy conditions, Anui performed extremely well. In the lightest of breezes she is away. In strong wind, reefed down, she flies. Under engine she is surprisingly easy to maneuver and very responsive. Of course we are a bit biased and a little besotted. But a good test of Anui's sailing capability was when our friend Phil Brown spent a couple of weeks on board. He is an experienced multihull sailor, skilled at sails trimming and he was there when winds were blowing daily at 25 to 30 knots for the duration of his stay, courtesy of cyclone Ann. We did not let the conditions stop us and sailed every day. Phil's verdict was: "she sails like a dream". As for her internal finish, Anui is so much to our liking: beautiful cedar veneer panels throughout, comfortable accommodation for us and another couple, practical to live in, a real home with great style.

So with these positives firmly kept top of mind, we treated every set back with annoyance of course, but also with a philosophical approach. Although painful to go through, our first five months of teething problems were to be expected. There is always a transition period when you move from one boat to another. In the process we have learnt a lot about her systems, her idiosyncrasies and we have made her truly ours. So here are the ten major tasks we tackled during our transition period:

1. Repairs to rotten anchor hatch and delamination
2. Stainless steel chafing guards
3. New charting software
4. Resealing of all the hatches and some deck fittings
5. New solar panels
6. New mainsail
7. Improved sun protection
8. New A frame
9. Repairs to the water-maker
10. Repair to the engine dog clutch

What follows is a record of what we did to ready Anui for her new beginnings with us. It is there as a reminder to us and to our readers that a boat needs TLC, that life afloat is not all champagne sailing, and that maintenance is an on-going activity which goes hand in hand with boat ownership.

## 1. Repairs to the rotten anchor hatch and areas of delamination

The Marine Survey had uncovered rot around the anchor well and an area of delamination near one of the dagger boards. So we got all that attended to as part of the agreed purchase price.

The rot was a surprise. The boat is foam sandwich construction. But the edges of the anchor hatch were made in wood to simplify the process of getting a lip in the hatch and rounded corners. Unfortunately water got in and the lip of the locker rotted. It was ugly as we had to chase the rot till we got back to the foam core, a lot further than we expected. Ryan Thacker from 143 Boat Building took care of this and we were impressed with his thoroughness but practicality. He is now our shipwright.



We have lived through dealing with rot on our previous boats and knew the drill: get back to healthy wood, seal it, put new and healthy timber in and glass it, then repaint. But we had not expected this on a foam core and fiberglass construction!

As for the area of delamination next to one of the dagger boards, it involved grinding the spot down, bogging it, re-glassing and repainting. It is not hard, but it takes time. Ryan also took care of this. The cost of this work had been negotiated as part of the purchase price. So for us, the main expense was marina fees. The work got done in a wet berth at Boat Works.



Being paranoid about more delamination, we went through the topsides with a fine toothcomb and got every little crack in the paint fixed at our cost. Every fissure in the paintwork has the potential to create an area of delamination down the track, so we felt it was best to address this before anything nasty developed. This was particularly needed around the large saloon windows which had previously been covered with black sunshade cloth, and the paintwork had cracked in places. Apparently the temperature underneath dark covers can be 15 degrees hotter. On a 35 degree day, which we had regularly, the temperature under those so called sun protections could reach 50 degrees. It is not wonder the paintwork had suffered! This also led us to make some decisions around sun protection, which we talk about in item 7.

## 2. Stainless steel chafe guards

On Anui, the edge of the hulls was not protected against mooring ropes rubbing. So we had Choice Stainless Steel at Boat Works shape some stainless steel strips and affix them to the edge of the hulls. We now have three of these along each hull wherever the cleats are.



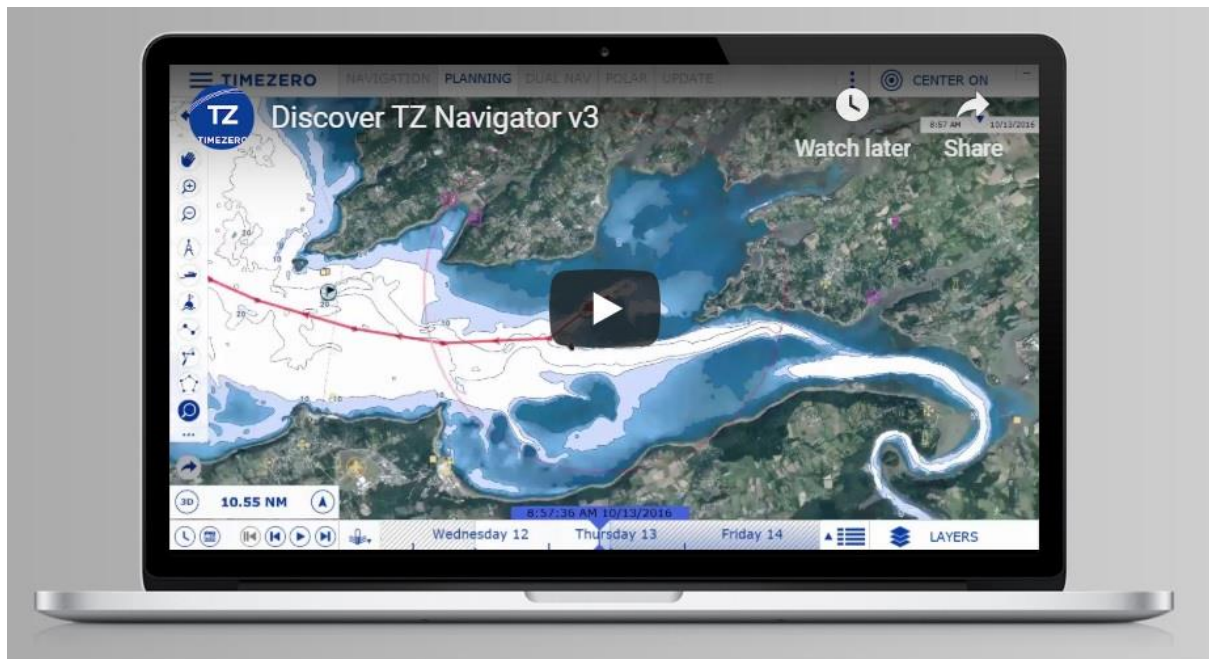
And months later we reckon we will have more of these made along the outside of the sugar scoops. No amount of care when you come in or out of a marina will totally avoid the hulls leaning against the edge of a jetty and taking a bit of paint off, even with fenders at the ready!

These strips might also prove useful when we come into a jetty. In Queensland and New South Wales, most of the ports you stop at have floating pontoons which are well protected, so you don't need rubbing strips. But in Victoria and Tasmania, that is not the case and you need to protect the edge of your hulls from the rough edge of quays and jetties. A job for Choice Stainless Steel when we get back to Boat Works in November 2019.

### 3. Charting Software

We transitioned from Take It Easy which had a brand new Raymarine Multi Purpose Screen with Navionics charting software, to Anui with an out of date charting program run on an XP computer. Within a few weeks of buying Anui, the antiquated computer died and got a rubbish bin burial! We needed to get all the navigation software and AIS to run on one of our laptops and be relayed to a large screen on a pivoting arm that we use when underway. The old charting software could not be transferred, being old, out of date and sold by a company that was no longer in business. So we had no choice but to search for a program that would run on a Windows 10 laptop and talk to the NKE navigation system. Although we run Navionics on our Ipad and smart phones, it is not integrated to the rest of the gear and really is just a back-up and planning tool.

So we did our research and elected to purchase Time Zero Navigator. It runs independently from the NKE navigation instruments for now, but we will upgrade later so it does.



The NKE instrumentation on Anui is excellent. We had never heard of it, until we did our research and found it is an offshore system used by circumnavigators. One of the things we quickly realized is that Scott Armstrong, builder of Anui, equipped her with the very best gear he could at the time. So the instrumentation is not something we intend to change!

#### 4. Reseal all hatches and some deck fittings

When you spend monsoon season in the sub tropics, you have to weather a lot of heavy rain. The start of 2019 was particularly wet, with huge downpours as a result of various cyclones further up the coast.

During the deluges, Anui did a great impersonation of a sieve! It was raining inside...buckets, pots and pans were strewn around everywhere to catch the copious drips. There are 16 hatches around the cabin, the bedrooms, the bathrooms, the galley and every one was leaking, some more than others! Some of the hatches leaked from the dried up seals between the glass and the frame, others leaked between the frame and the deck, and a few leaked from both spots! Over several weeks, they all got resealed.





When the next downpour came, we had a chance to test all our good work. The resealed hatches held tight, but the big saloon windows leaked! Man we really did buy a sieve!

Not particularly keen on taking out the big windows, Wade cleaned up the old sealant around the surrounds of the frames with the hope that it would be sufficient. It was in 5 out of 6 of those windows. For one recalcitrant one, the glass had to come out also as we still had dribbles at the next bout of rain.



And then, would not you know it, even after all this work, there were two persistent drips in the starboard hull, coming from lose fittings on deck!

One was easy to get to, being a jib sheet pulley just on the coach roof. The other one was harder; Wade found fresh water was collecting in the sump. Upon investigation he found it was the u bolt next to the dagger board which allows it to be dropped or raised. This required us to deconstruct the cedar paneling inside to gain access to the dagger board and reach behind it to be able to reset the bolt!



We are hoping this is the end of the war on drips for a while! At least now we know the drill. The seals on hatches have to be redone every 6 to 8 years. Some on Anui had obviously been fixed up before, but not all. And you need to check your deck fittings!

The words of wisdom from everyone we talk to is that you just attend to the job as and when leaks occur. We were just unlucky all the hatches started giving up at once. But on the positive side, we had other issues to attend to while waiting for other fixes, so it passed the time and it's now all sorted for a few years!

All this resealing is not a terribly difficult job to do, but it is time consuming and what takes the longest is the clean-up of the old goop so you have a totally clean surface to put new adhesive sealant on. If you don't do this carefully, the product does not adhere properly, and you are back to square one with leaks. We went through an incredibly large number of sealant tubes! We reckon we should have shares in the Fix Tech Company! We used two of their products: Fix Tech SF200 in black used to seal the glass into the frame, and the Fix Tech 15 in white which seals all fittings to the deck.



## 5. The Solar Panels Saga

There are two parts to the solar panels saga. When we purchased Anui, she had slim flexible solar panels on the cabin and cockpit roofs. We thought they were pretty smart, lightweight and handy because you could within reason walk on the edge of them without damaging them. They were however not producing the amps they should have and Scott Armstrong, previous owner and builder of Anui, indicated they had not been working at their best for a while. So as part of the sale of Anui, he agreed to supply new slim line panels if we took care of their installation and connection. Fair enough we thought!

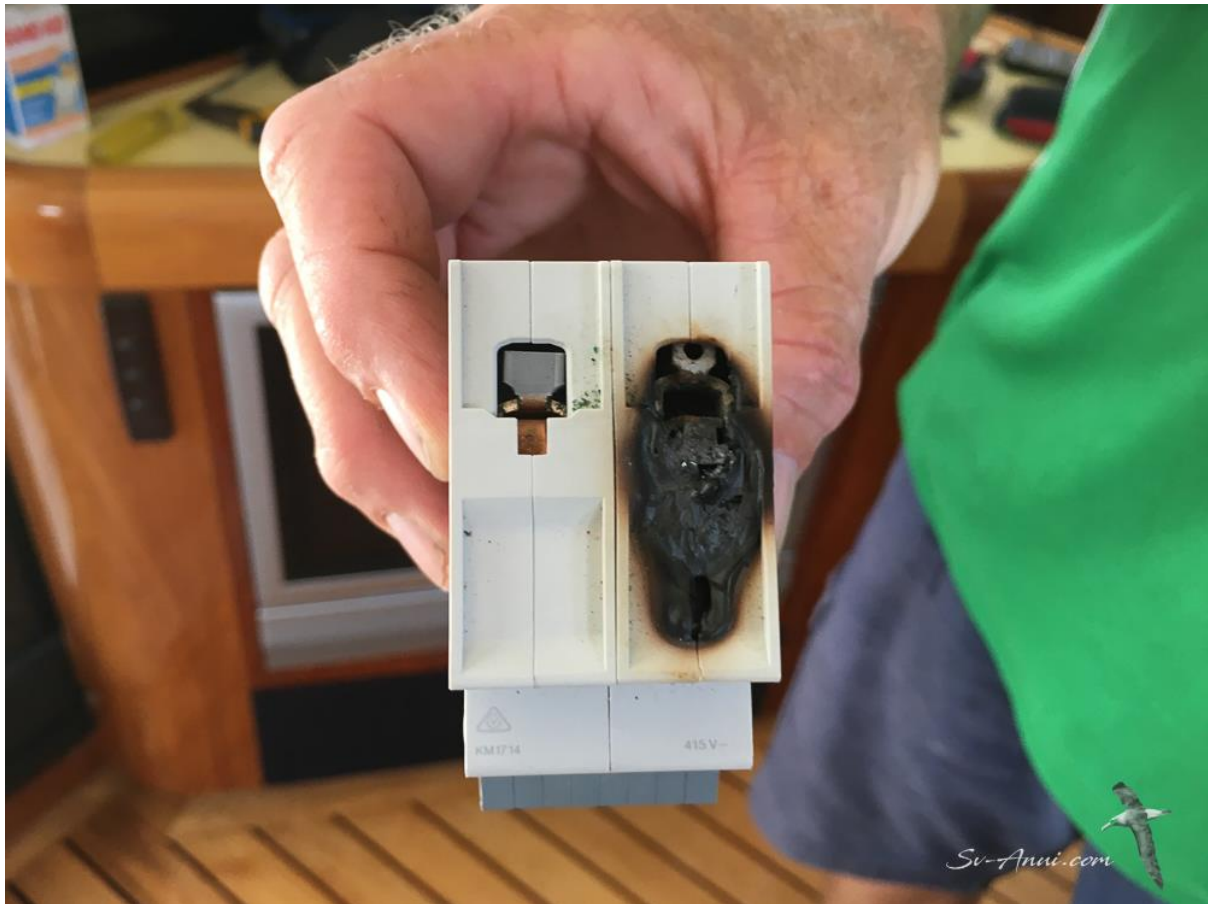
So we proceeded to remove the existing panels, clean up the roof, adjust the connection points and stick the new panels on the roof, then called an electrician to take care of the connection. Being on the cabin and cockpit roof, when you sail, some of the panels can end up being in shadow, so they are connected in pairs and in a particular way, something beyond our area of expertise!



We had to weigh the panels down with what we could so the adhesive goop would do its job! Tins, dive weights, casks of wine were requisitioned!

However our handy work did not last very long. A few months later, it became obvious the panels did not produce what they were supposed to. Because they were brand new, we thought there might have been a problem with the way they were set up, so we called on another electrician while in Manly this time, to investigate. What Dean from Electech found was a concern, hence the second part of the saga.

First, there was the small matter of wires not properly connected to the power board and shorting, which could easily have started a fire. We certainly were not impressed with the previous electrician's work.



This circuit breaker was replaced and wires properly reconnected.

But then Dean checked the power coming from the solar panels and declared four of them dead – that's four out of eight! He also told us that although they could supply us with new ones, he could not guarantee they would work. In fact he was quite negative about their reliability. The idea is good, but the technology is not up to standard! This is what we had heard from other yachties too.

Power generation on a boat is one of the critical systems. We could not afford to have this happening in the middle of nowhere and keep having to replace them. There was only one thing to do: get rid of the slim line panels and install rigid ones. More power, more reliability, less cost. We initially thought we'd remove the faulty ones, and buy two large rigid ones, but as we were removing the slim lines panels, more failed. So in the end we took all the existing lightweight panels off, ordered four large rigid panels and got them installed, correctly connected and have not looked back since.



Removal of the original panels and clean up of the roof!



Port side rigid panels in place

Many people ask us about warranty. Why did not we get the faulty slim line panels replaced under warranty? We did not purchase them, Scott Armstrong did, and we wanted the problem sorted quickly and once and for all. So we did what we thought was best and moved on!

## 6. New Mainsail

On Anui the mainsail was the original sail: 19 years old, a bit saggy, patched up and ragged out. Having come from brand new sails on Take It Easy, we knew it would not take long before we would invest in a new mainsail.



It only took three weeks. At the very first opportunity to sail in Moreton Bay in brisk conditions requiring a reef, we managed to rip off the first reefing point! We also noticed how damaged the bottom panel of the mainsail was: yellowed from sun damage, on big patch already stuck on, the cloth next to it threatening to tear at the slightest provocation.



The sun damage was particularly noticeable on the bottom panel of the sail. One of the things we discovered is that on larger boats, the main when down is often flaked out in a cradle rather than straight into a boom bag. This was the case on Anui. The problem with this kind of cradle is that it is open to reflected light from the deck which very quickly damages the bottom panel of the sail. The rest of the sail is protected inside the boom bag, which is attached to the outside of the cradle.

So we fitted a length of shade cloth at the bottom of the cradle to protect the sail from any further damage while allowing rainwater to fall through.

When came time to get the reefing point resewn we briefly considered getting the bottom panel of the main replaced, but upon further reflection, we decided to bite the bullet and get a brand new sail made. 19 years of service is really more than you can reasonably expect from a sail. And having had the experience of new radial cut sails on Take It Easy, we knew the difference it made and we wanted a similar sail construction for Anui.

We discussed all this with Mike Sabin from Gold Coast Sailmakers. Mike proposed three different cloths: Dacron, Laminate and Hydranet cloth. Each provided a progression in strength, resistance to stretch, longevity, and of course cost! We went for the best we could afford: radial cut Hydranet. It should outlive us!

Mike also altered the top of the sail so the headboard is easier to fit, and altered the boom bag so the whole sail and headboard would fit inside it. The sun is a killer. No point spending a small fortune if you don't protect the sail when not in use. Here is the before picture on the left - Dacron straight cut, and the after picture on the right – radial cut Hydranet! You can see the difference in the number of radial panels on the right, compared with the broad bands on the cross cut construction on the left.



## 7. Improved Sun Protection

The sun in the tropics and subtropics is a killer. For our first summer in southern Queensland, we learnt a few things about protecting yourself and your boat from too much sun. We did four main things:



Shady cockpit – when you are at anchor you want a shady, cooler cockpit and protection from sun and heat on all your hatches. So investing in shade cloth that is easy to roll down and back up around the cockpit is a necessity. Anui already had shade cloth in good condition around the cockpit, and although black in colour, it has the added advantage of providing a degree of privacy.



The big side windows were covered with the same black shade cloth and could be clipped on or off with press studs. The cloth blocks 70% of the sun and heat but still lets you see out. However we found that in full sun, the temperature of the windows was hotter than everywhere else on the top sides and over time cracked the paintwork. We have had the paint repaired and have replaced the black cloth with very light grey material. We got ours made by Marine Canvas & Trimming at the Boat Works.



For the smaller hatches, we installed some perforated One Way Vision vinyl film to reduce the sun and heat penetration into the cabin. This can be purchased in rolls and is relatively easy to cut to size and stick on the hatches. It really cuts down the heat. One side of the vinyl is white, the side you look through from the inside of the cabin is black.

In retrospect, we probably should have done away with the shade cloth on the big windows and installed the vinyl film there too. We may still do this at some stage.



Dinghy Chaps – if your dinghy is an inflatable one, get some chaps made to protect the tubes. Without them over time the PVC or Hypalon will perish. This had happened on Peasy, Take It Easy's tender. With age, the tubes go sticky and become impossible to clean. Getting chaps is a lot cheaper than buying a new dinghy! And pick a light colour if you want to be able to sit on the edge without burning your bottom. We got ours made by Gold Coast Sailmakers.

## 8. New A-frame

One nasty thing that was discovered post survey was a crack at the base of the A-frame along the welding line. This is hard to see, but once you know it is there, you can definitely spot it!



It was found by chance, as Wade was concerned about chafe on the mooring line when we use a swing mooring, where it rubs against the sharp edge of the A frame. He wanted a round pole put there so the rope would have a round edge to slide through. When the welder had a look at the set up, he pointed to the cracks and declared he could not weld over that and the A frame needed to be replaced! He referred us to Scott Keogh, a rigger based at the Royal Queensland Yacht Squadron in Manly.

The role of the A-frame is to counter the force which the jib and forestay place on the cross beam. The forestay stops the mast from falling backwards and is what the jib furler rotates around, and the rigging on either side of the A-frame stops the cross beam from lifting at either end. So it is rather critical that the A frame be strong.

Why did the cracks develop in the A-frame? Possibly wear and tear... Anui is nearly 20 years old, aluminium wears over time. It may also have not been built strong enough in the first place. The rigger's indication was that the cracks were not new and had been there for a while. We were rather fortunate to have discovered this while in the marina. If the A-frame had failed offshore, it could have had disastrous consequences. We had not noticed the cracks when we checked the boat, and neither did the marine surveyor. And no, we did not put a claim against his insurance, even though we had paid extra for him to check the rigging at survey time. We figured we would get the thing fixed and move on!



The original A-frame was removed, as was the jib furler, and halyards were tied on to support the mast. We could not sail anywhere. All we could do was motor! So while the rigger was making us a new, stronger A-frame, a seagull striker as he called it, with rollers for the mooring line, we anchored in a neighbouring bay to avoid escalating marina costs.

The frame was then anodized. We were out of action for five weeks during the construction and anodizing time! Scott Keogh also climbed up the mast to check our rigging and found a couple of cracks in the lower tangs where the lower back shrouds attach to the mast. He declared the rigging safe to sail with, but we will get the tangs replaced at the end of this season when the boat comes out of the water!

A frame ready to be re-installed, and Scott checking the rigging!



## 9. Repairs to the water-maker

When you want to spend time in remote areas without constantly needing to come back to port or pricey marinas, having the ability to produce your own freshwater is a big ticket item. It is not until late April that we decided to give the water-maker a try. Until then we had not had a need, relying on town water to fill our 400l tanks. In hindsight we should have tested this much earlier! The water-maker had been pickled for a couple of years. So when we did give it a go, it was one of these 'Oh shit, here we go again' moments!



When we first tried to switch it on, we were anchored off Fraser Island. We found pressure was not building, and we could not pump up sea water into the system. We suspected the pump needed priming, probably having air in the pipes. Once primed, the next problem was water squirting everywhere from a crack in the end piece of one of the pressure vessels.

We knew we had a spare on board, so initially thought it was a matter of replacing the end piece, and contacting Open Ocean, the manufacturers based in New Zealand, to order new ones, just in case! However we did not feel we could carry out the work at anchor. We booked into Bundaberg Port Marina, lined up Ray from R&B Marine to oversee the repair. Wade deconstructed the water-maker and tested each part of it in turn, helped by Ray and his off-sider.

What they found many hours later was that there was not just one problem, the cracked end piece, but four! The lifting pump was dead, the choke was full of gunk from the strong pickling solution, as was the pressure gauge. All these parts had to be replaced. It seems the whole saga was due to using too much meta bi-sulphate in the pickling solution, and leaving it in the pressure vessels for too long. Over time the solution ate away at some of the fittings which perished. A trap for the unwary!



Poor Wade looking a bit dejected, collecting the leaks in a bucket!

We managed to buy the required spare parts in Bundaberg and the water-maker was reconstructed, tested and declared operational on Wednesday 8<sup>th</sup> May, the afternoon of our friend Phil's arrival for his trip on board Anui! The whole repair had taken a week.

In the process we have learnt a lot about how the water maker works!

## 10. Repair to port engine dog clutch

Just when we thought we were through with all the calamities, and were motoring out of our pen at Bundaberg Port Marina to leave with our friend Phil for the reef, the port engine would not engage forward. We had literally just come out and had to get back in.



Wade dived into the engine room, but declared it was beyond him. We were incredibly lucky to catch Kent Noble, the local mechanic, very early that morning, before he started working on his 13 other boat jobs. He was quick to diagnose what was wrong: insufficient movement in the gear selection cable, which ended up wearing the teeth on the dog clutch and meant the engine would not go into gear.

Kent was resourceful and fabricated a temporary fix in a few hours, to get us out of trouble. A proper fix requires the boat to be out of the water for about a week... another item for the Boat Works visit at the end of the year!

We think the port engine will need work beyond just the dog clutch. It always runs hotter than the starboard engine. Let's hope we can cajole it for six months! And if the dog clutch is worn on this side, it probably is a fair bet that the clutch on the starboard side is not in the best of shape!

So there you go: the tale of woes and wrestles with Anui.

The moral of the story is that you can't blame the surveyors for every calamity that hits you post survey. You trust they will do a thorough job, and ours found problems we were not aware of and neither was Anui's previous owner. Really, if you want to be 100% sure of everything, you need to employ specialists to check each system: an electrician for the batteries, wiring and electrics, a professional rigger for the rigging and sails, a diesel mechanic for the engines... So you hope the marine surveyor you contract will uncover what you might not see yourself. This guides you in your decision to buy or not and gives you the ammunition to negotiate on price. But then you just have to deal with what crops up later. Would we still have bought Anui if we were aware of the 10 items we described here? Yes, but we may have been able to negotiate harder on price.

All of this just goes to confirm the old adage "Cruising is the art of fixing your boat in exotic locations" really is true. Maintenance is a never ending activity, but it seems we might be over the hump with the major ticket items. Touch wood, lots of wood!

Our November stay at Boat Works is very likely to be more than just a quick antifoul! The to-do list is growing already and we might have to be prepared to stay there for a couple of weeks!



We love our boat, and with lots of TLC, we hope Anui will give us many years of adventures. She is a head turner and sexy looking vessel... a bit like an old sport car – with timeless style. We love sailing her, we enjoy living on board. She is our dream boat and our home, the perfect mix of sailing performance, aesthetics and livability.

