OUTBOARDS VERSUS DIESELS

by Ross McCombe

There appears to be a lot of prejudice against having outboard motors in a performance cruising catamaran. Having owned a cat with diesels and one with outboards I feel qualified to make the comment "If you want a performance cruising catamaran outboards are the way to go".

Sadly the people writing the glossy ads tell us of 'performance' cruising cats with many options, including diesels, and then go on to talk about their 'sparkling performance'. In reality performance is affected by weight, so how can a cat with heavy options be considered a performance cat?

Now don't get me wrong, I don't have an issue with this style of cat. These cruising cats do have a place in the market, but for those sailors out there (like me) who want to be able to sail, rather than motor in light conditions and achieve double digit boat speeds easily and comfortably, this is not the style of cat for them.

A 'performance' cruising cat can sail in 5kts of wind and as a result doesn't need to motor very often but when we do we motor at 7-9kts, using about three litres an hour for each motor, which is quite respectable.

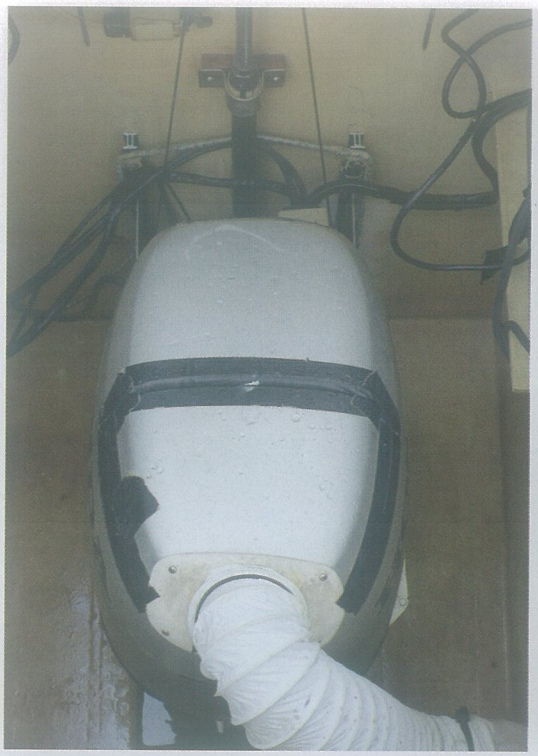
To sail in light airs she must be light herself, so why would you weigh her down with diesel engines? One diesel engine can weigh more than two 4-stroke outboards of the same horsepower so a performance cat could carry an extra 200kg, based on 30hp motors, which as a percentage of gross vessel weight is huge. It's not just weight of the engine to be considered. There are all the extras like engine beds, wet exhausts etc, so there goes the 'performance' and the comfort. A light cat rides over the big waves making bridge deck slam almost non-existent giving a much more comfortable ride with lower loads on the structure.

We're told we need diesels for power generation. With today's modern solar and wind technology and an adequate battery bank we have found you don't need to run motors for power generation very often. A small generator is all that's needed to top up after a run of cloudy, still days. Oh, but what about hot water? Gas works extremely well and is very economical with the right choice of system. Then there's refrigeration. Use all that free sun and wind and run your fridges and freezers off 12 volt. An added bonus is that if you have to leave the boat or haul out the fridges still run.

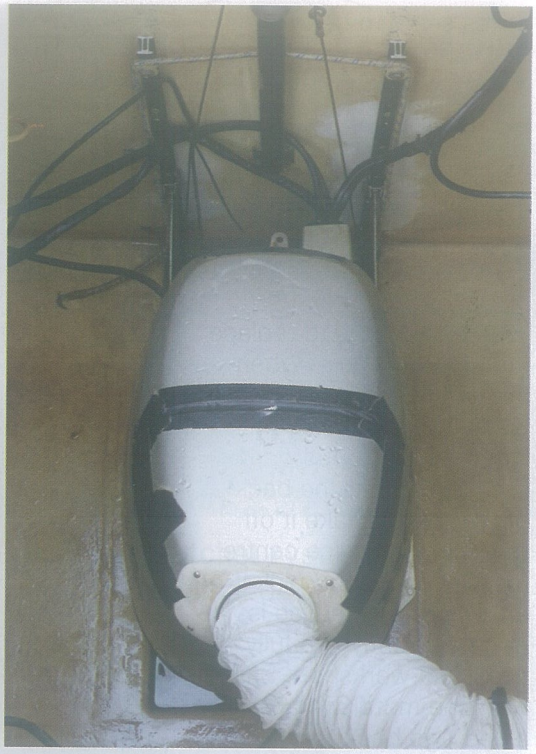
These are all much better options than running diesel motors. Just remember this is a 'performance' cruising cat and should be able to sail in light winds so the motors are

used mainly for anchoring and manoeuvering in tight places. We ran diesels in our last cat and also used them for power generation and refrigeration, two, half hour runs each day. After a very short period of time the diesels acquired a heavy carbon build up and the bores glazed resulting in higher maintenance costs. Diesels like to be worked hard and short runs under low loads are very detrimental.

Outboards are much easier to install and service, and if installed well they don't have cavitation problems. Ours are installed in the hulls in an area completely sealed from the rest of the boat so there aren't any through hull fittings to worry about. They raise and lower on slides and a plate seals the bottom of the hull when in the up position creating less drag and better boat speed. In the down position the propellers are in exactly the same position as they would be on a shaft or sail drive leg. Friends who have sail

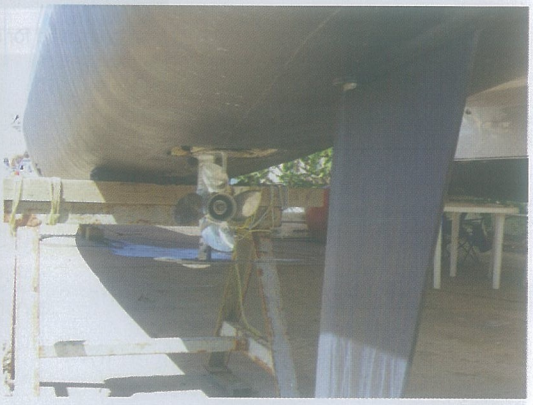


Motor up.



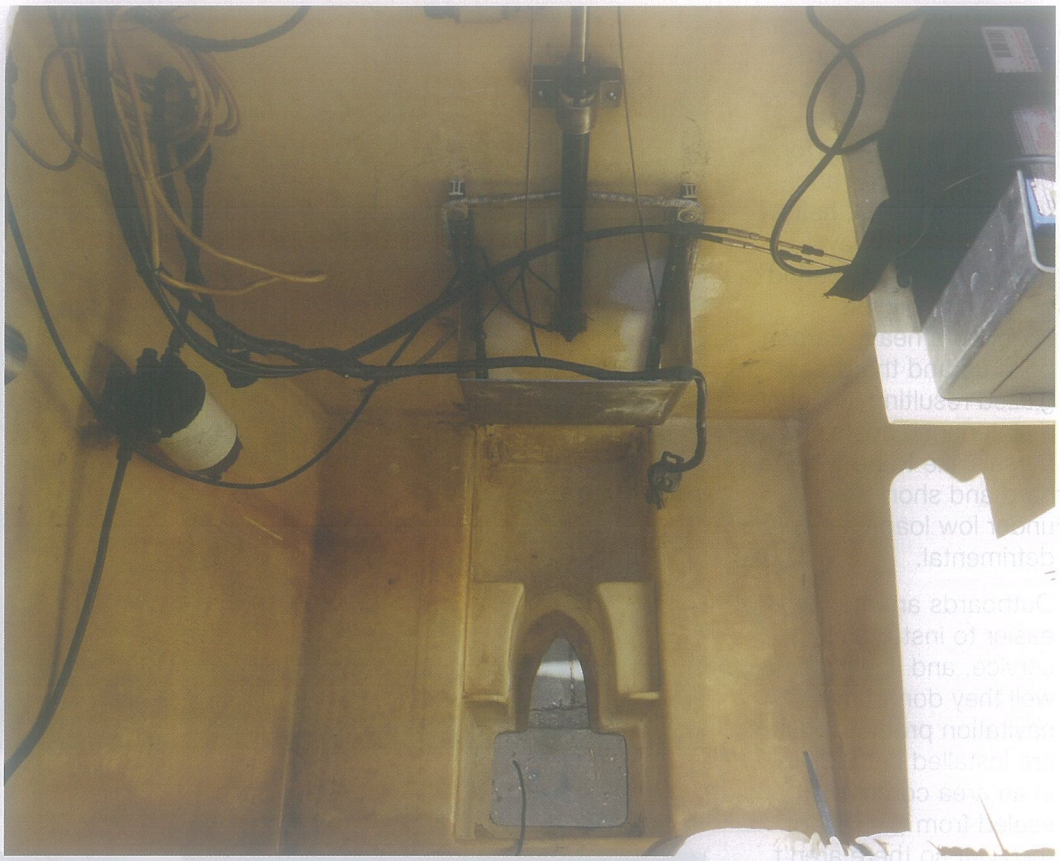
Motor down.

Motor up with plate closing hull.



Motor down showing prop position.

drives seem to be forever replacing the gearbox seals in the legs. To do this the boat must be out of the water, creating another unnecessary expense. With the outboard leg raised there is less pressure on the seals and they last much longer. After 10 years we are yet to replace the gearbox seals. When the annual service is due we pull up alongside the wharf, pull one outboard out, drop it into the back of the ute and take it off to the local service centre (or they come and pick it up) where the service is done efficiently in a fully equipped workshop. Still with one motor we are able to go back to our mooring until the service is completed. Another trip to the wharf sees the serviced outboard reinstalled and the other one taken out and sent off for its service. To lift one of our outboards out takes 45 minutes. Having a diesel motor serviced requires an engineer to come to the boat and work in an area which is often very tight and uncomfortable. This can reduce the quality of the service and adds to the cost. Our 4-stroke outboards that are serviced regularly have proven to be very reliable.



Motor removed for service.

We know of people who have been convinced to remove their outboards and replace them with diesels, only to be disappointed with the performance, or lack thereof, of their boat after the change. One endured the diesels for a year before removing them and installing outboards again, a very costly exercise. If outboards are causing problems such as cavitation or unreliability these issues are easily fixed.

Check the installation, I have seen some pretty unusual installations that just can't work efficiently, and have the motors serviced annually, as you should with any motor.

THERE ARE THOUSANDS OF OUTBOARDS OUT THERE BEING USED BY BOTH THE PRIVATE AND COMMERCIAL SECTOR, SO WHY WOULD THEY BE CONSIDERED UNRELIABLE JUST BECAUSE THEY'RE INSTALLED IN A SAILING CATAMARAN?

There are thousands of outboards out there being used by both the private and commercial sector, so why would they be considered unreliable just because they're installed in a sailing catamaran? A friend has 4,500 engine hours on the outboards in his charter boat and they are going just fine. We on the other hand have only 1,000 engine hours after 10 years and 23,000nm around Australia and South East Asia. Why so few hours? She's a 'performance' cruising cat that will sail in light conditions because she isn't bogged down with unnecessary weight. As a result we don't have to motor very often.

After 16 years of 'living aboard', six years with diesels and 10 years with outboards, I have never found the outboards to be inferior to the diesels in any respect. In fact I believe the benefits of having outboards far outweigh the benefits of diesels.

So now tell me why a performance cruising cat must have diesels!