Neil Dunstan:
Ebb & Flow. . .

How Good Is This 25hp 4-Stroke Parsun?

Quite some time ago, F&B published a report on the 25 hp Parsun 4-stroke outboard engine, and then some time later I did some research on Parsun outboards in general for a story in F&B.

In the first instance the general opinion on the 25 hp Parsun 4-stroke was that after a week or so on test with the family of the editor, there did not seem to be many obvious problems with the engine except that it was very heavy to tilt up and was not available with a trim and tilt system.

In the second instance I was not able to track down too many of the Parsuns which were sold from the then agent, Sarina Marine, but of those that I did manage to find, the owners seemed to be quite happy with them. However, most of them were still reasonably new, so any long term observations were not available.

Since then I have obtained a Parsun 25 hp 4-stroke which was part of the stock of outboards left over when Sarina Marine closed down, being a casualty of the Global Financial Crisis. This engine sat in my shed for a while until I decided which engine I would use in my project to rebuild an old Dehavilland Trojan. Eventually I decided to use the Suzuki 50 hp 4-stroke which I had previously installed on my Quintrex 4.45 Dory, and this was then fitted to the Trojan as was explained in the series of articles called "The Trojan Resurrection" last year in F&B.

This meant that as I had no engine on the Quintrex and the Parsun was sitting in the shed, it was fairly obvious that it would end up on the Quintrex. However, I was a bit worried that it may be a tad small for such a big tinnie.

Nevertheless, the engine was duly fitted to the Quintrex and did a surprisingly good job, pushing the big 4.45m Quintrex along at over twenty three knots, and cruising comfortably at sixteen knots. This was fine for me, as I don't like to push the boat too fast in the conditions usually found where I normally go to sea off the coast at Sarina, where I live.

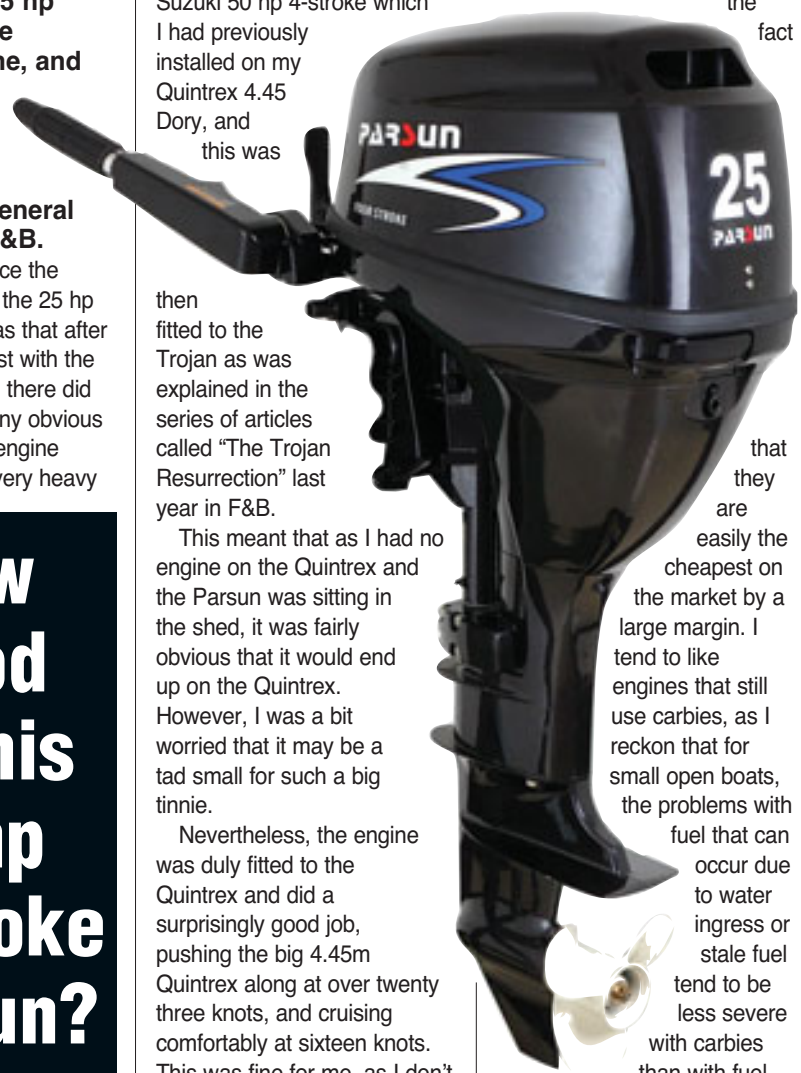
So the Parsun has been used for some time now and has been very reliable so far, and is amazingly frugal on fuel. It has now done enough hours to require the first service, and is now half way to the second service. The most noticeable thing that occurred was normal for most 4-strokes and that is, that it ran better and became smoother as the hours began to build up.

I feel that I can now give an experienced opinion on the engine for the many people who have asked, "Are these Parsun engines any good?".

I genuinely reckon that they are as good as any other engine in their class despite the fact that they are easily the cheapest on the market by a large margin. I tend to like engines that still use carbies, as I reckon that for small open boats, the problems with fuel that can occur due to water ingress or stale fuel tend to be less severe with carbies than with fuel injected engines.

I have found that carby engines can ingest quite a bit of water in the fuel or crook fuel before they give up the ghost as they surely will if given enough of the bad fuel. However, I reckon there is a better chance of making it back with this less sophisticated type of engine.

Also, it is sometimes possible to drain the system and carby bowl and get the engine started again whereas if the engine is fuel injected, when it stops - it usually stays stopped.



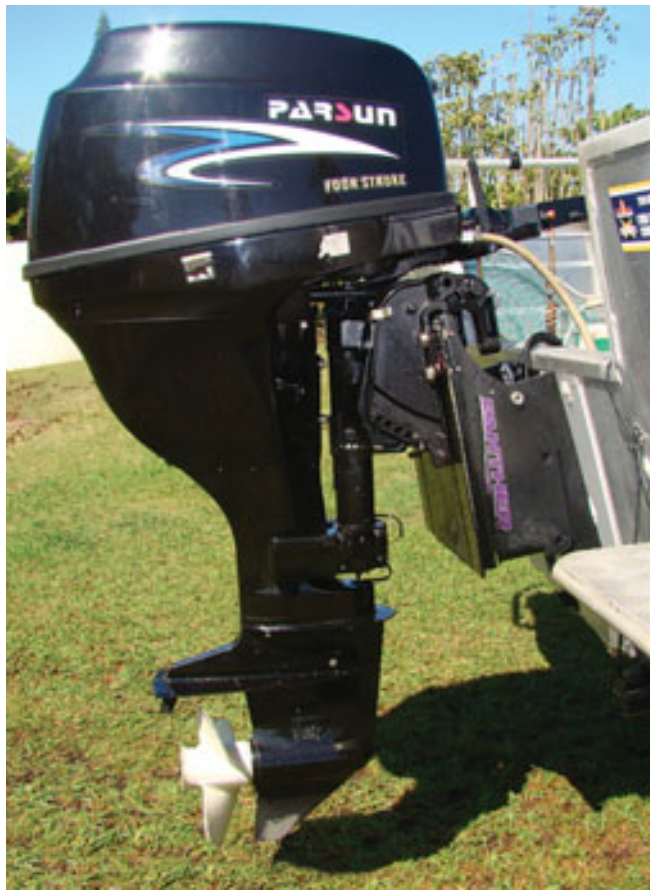
Parsun 25hp 4-Stroke Specs

- Super quiet efficient 4 stroke OHV marine engine
- High grade marine aluminum alloy for ultimate corrosion protection
- Tilt & trim with shallow water drive various positions
- Low oil indicator for increased protection
- Twist grip throttle control for easy manoeuvrability & safety
- Thermostat controlled water cooling system
- Safety lanyard with emergency shutoff
- Easy forward-neutral-reverse gear shifting
- Vibration reduction system for smooth performance
- Start in gear protection for increased safety
- Adjustable steering friction for easier manoeuvrability
- CDI ignition system for trouble free starting
- Innovative large recoil wheel assists easy starting
- Quiet, through the propeller hub exhaust
- Ultra low emmissions, quiet operation
- Quality 24L fuel tank with hose
- 2 Year Factory Warranty

The other major advantage is that if this problem does occur the cost of stripping and cleaning carbies is usually around $50 each,, whereas for a fuel injected system the cost can run into thousands of dollars, as they often need to have most parts replaced. When running large engines of say 115 hp or more, a fuel injected system is quite a bit more economical than a carby model, but if the motor is under (say) 50 hp, then the fuel economy advantage is minimal and I reckon not worth the trouble. All this discussion is because the Parsuns are all carby models, and do not have fuel injection in their range at present.

Since running this engine I have found that there was some truth in the previously mentioned problem of them being heavy to tilt up onto tilt lock. In fact, I would say that they are quite okay to get up onto the shallow water drive (which has two positions) but from there up to the tilt lock position, it is really hard and would probably be very hard for a small person to achieve.

To overcome this, I have fitted a Panther electric trim and tilt unit which does a very good job of trim and tilt much the same as a hydraulic system would do. These systems are made in America and are imported by "Island Inflatables" the Australian importers of Parsun outboards. They are a cheap and easily



installed option to solve the problem of tilting the engine.

One thing that I found with the engine that took a bit of head scratching to overcome, was a problem that occurred some time after it was installed.

The engine ran completely trouble free for quite a while until I took my daughter out to give her some practice at boat operation before she went for her recreational boat driver's licence. We had been doing a lot of low speed work around the bouys and so on for probably an hour or so, and when it was time to go back to the ramp she opened up the throttle and the engine started to miss badly. We ran the boat back to the ramp at just above idle speed and it was running perfectly - but when the throttle was opened it again started to miss badly.

I took it home and had a good look at it but could not replicate the problem when running it in the back yard. A bit later I was talking to Mark Lowth who had owned Sarina Marine (and is now one of the regular Boat Mag's team) and he offered to come out with me to see if we could figure it out.

We never put the boat in the water without some fishing gear, so we took off and gave it a run at top speed and it ran perfectly, after which we dropped back to trolling speed and ran some lures out the back. We did this for a while and still no missing until we managed to get the lures tangled together after making a turn too sharply. After pulling the lures into the boat it took us at least twenty minutes to get everything untangled and all the while the engine was ticking away on the back without missing a beat.

When we were ready to go again I opened up the throttle and, hey presto, it started to miss again and it was then that it dawned on Mark what was the problem. The engine had been sitting on the rack at Sarina Marine for a couple of years before I obtained it and we hadn't done anything to it before using it except to give it the pre-delivery service. It appears that after such a long time, the water pump impellor had gone a bit hard and while it was ok and pumped sufficient cooling water for normal running, when it was idling the output dropped away enough to get the engine hot enough for the high temperature protection system to operate.

This meant that the electronics in the high voltage system that supplies the spark went into limp-home mode and would inhibit the engine from revving over a predetermined low limit by only letting it fire enough to keep the engine running at low speed, ie limp home mode.

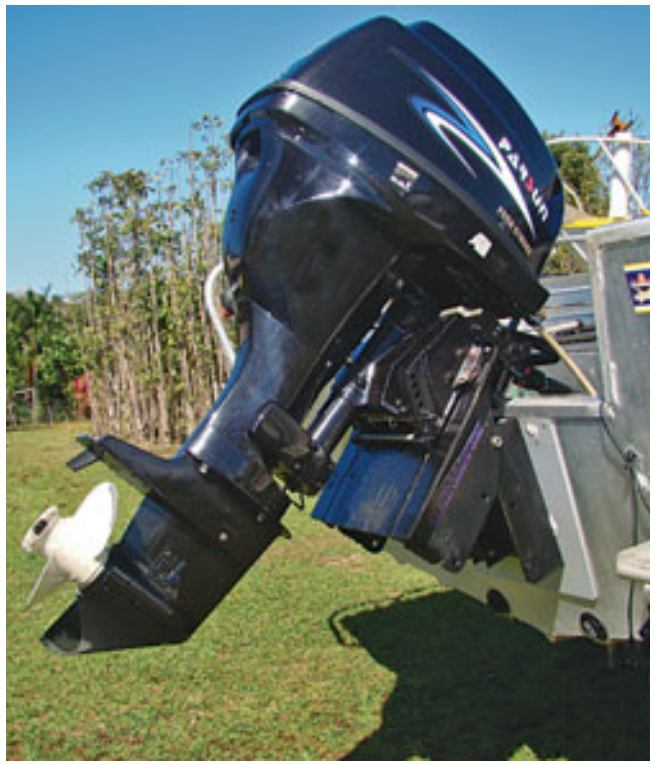
We then took her home and pulled the water pump impellor out and found that it had gone hard over time and was not pumping enough water at idle - so a new unit was installed and the problem was solved. At this time we discovered another great advantage of owning a Parsun.

If you ever have to buy any spare parts you will be amazed at how ridiculously cheap the spares are. The Parsun distributor, "Island Inflatables" carries a full complement of spares in Sydney and will get them to you in a couple of days at prices that will really amaze you. For instance, the cost of the water pump impellor was less than $10 and the equivalent unit for another well known brand of outboard was $35. I also fitted a battery charging unit to the motor as it was a manual start model. This cost just $7 when the same unit for another brand of motor was $70. I also remember when Sarina Marine was in business, one of their customers dropped his 15 hp two stroke Parsun and broke the tiller handle off. The cost of the replacement (which was a complete tiller, with throttle controls etc) was just $17.

So far I am quite happy with this motor and intend to keep it permanently on the Quintrex.

I was also having a good look at how it was put together and there were a few features that I found quite interesting. Overall the castings and machining seemed to be well done**.

***Time Out: Readers are reminded Neil was an engineer before he retired, and is well qualified to make these judgements.*



The engine is a two cylinder of approximately 500 cc which is quite big for the horsepower. It has a dummy cylinder in between the two main cylinders which acts as a dynamic balancing system to smooth out the engine, especially at idle and seems to work quite well.

I also had quite a time trying to figure out where the choke was, as carby engines almost always have a choke for cold starting. On studying the carby carefully, I discovered that there is a cold start fuel enrichment valve fitted to the inlet manifold. This valve is operated by an electrical temperature switch which 'makes' when the temperature is below a certain level and lets the power from the lighting circuit energise the enrichment valve to the open position.

When the engine warms up, the switch opens and de-energises the enrichment valve, and away she goes with the normal fuel mixture; quite a clever set-up, really. The charging circuit also supplies power to an engine oil low pressure alarm light which glows red when the alarm comes up, so all in all, the engine is quite well protected.

The range of Parsun engines are currently from 3.6 hp to 40 hp in both two stroke and 4-stroke, but the 4 strokes only go to 25 hp at this stage.

As these engines are essentially a Chinese copy of a well known Japanese brand of very good repute, even to the point that the parts are mostly interchangeable, I suspect there must be some formal agreement between the two manufacturers or there would have been some major court battle over patents, etc.

We know that many of the other top brand outboards are being made in China too, so being made in China is not necessarily a bad thing, and as we know, there are a whole raft of cars, SUVs, 4WDs (etc) now being imported from China with quite a deal of success.

So from my point of view, the experience I have had with my Parsun has on the whole been quite successful and I would have no hesitation in recommending them to a prospective purchaser, especially as the cost of purchase is so far below many other similar engines on the market.

They would have to be easily the best value for money available.

Postscript:

Since I wrote this article, I have had a minor problem with the engine when the CDI pack which operates the ignition circuit began to play up, so I asked Mark Lowth to have a look at it for me, and he confirmed that it would need replacing.

This problem again showed up the advantage of the Parsun in that the replacement part only cost around $80, compared to the cost of exactly the same part for most Japanese brand engines which I believe are around $400 (plus). So even though the engine developed a fault the repair cost was negligible - and this is a fault that can happen to any engine which uses an electronic ignition pack, as they all do.

I have also discovered recently that there is a whole new range of Parsun two strokes due to be available in Australia around July/August . They are all three cylinder engines of 60, 75, 85 and 90 hp and will be at prices that will raise a few eyebrows given that with the super cheap pricing together with the value of the Australian dollar they should be good sellers.

Also I believe that they are looking at increasing the range of four strokes from the present maximum of 25 h.p. up to possibly 90 hp and with current ridiculous prices for Japanese and American 4-strokes they should be very well received.

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TBM