

## Five Years Later & Yanmar 6AY Is Still Like New

Tasmanian fisherman John Hammond repowered his commercial fishing boat Shandara with a Yanmar 6AY-STE marine diesel engine in July 2010. Now, some five years and 13,000 hours later, the Yanmar continues to deliver exceptional performance, exceptional fuel economy and dependable service.



Despite the hard work and years of crunching through the treacherous waters of Bass Strait, there's not an oil leak to be seen. Life with the Yanmar 6AY-WET has been trouble free for John Hammond.

Shandara was built in Hobart in 1982. The hull was based on an English design for trawling in the Atlantic, but the lines were adapted for cray fishing in Tasmanian waters. She measures 22.8m long, has a beam of 7.3m and displaces 200 tonne when fully loaded. Lightships she's a massive 70 tonne lighter with a 35,000 litres load of fuel and massive salt water holding tanks adding 50 tonnes when full.



John Hammond is the second owner of Shandara and splits his time between scallop and lobster fishing. The original engine was a 19 litre, 350 hp in line 6 cyl diesel which eventually 'just wore out'.

“I had already rebuilt that engine once,” John Hammond said, “but at \$50,000 to rebuild it a second time didn’t make good sense to me. It was old and very inefficient. I decided that it would be wiser to put that money into a new engine and the latest diesel technology.”



“I looked around and other pro fishermen who I respected kept telling that they had been doing really well with their Yanmar repowers”.

The commercially rated Yanmar 6AY-STE is an imposing marine diesel engine. Its weight alone is a massive 2365 kgs.

The bore of each of the six cylinders is 155mm and with its massive 180mm stroke the displacement is 20.379 litres. This engine features direct injection with a turbocharger backed with an intercooler in the induction system. We wanted a factory backed keel cooling and Yanmar were willing to develop the adaptor kit to suit.

Yanmar carried out a lot of follow up testing and monitoring to ensure that all was performing as it should, and now that adaptor is available to all Yanmar customers.

Jim Kibblewhite (Yanmar) would be able to supply more details.

One of the main reasons for choosing Yanmar was that the motor was not electronically controlled, it still has the basic alarms, but it does not shut down if there is a problem and leave you stranded at sea!

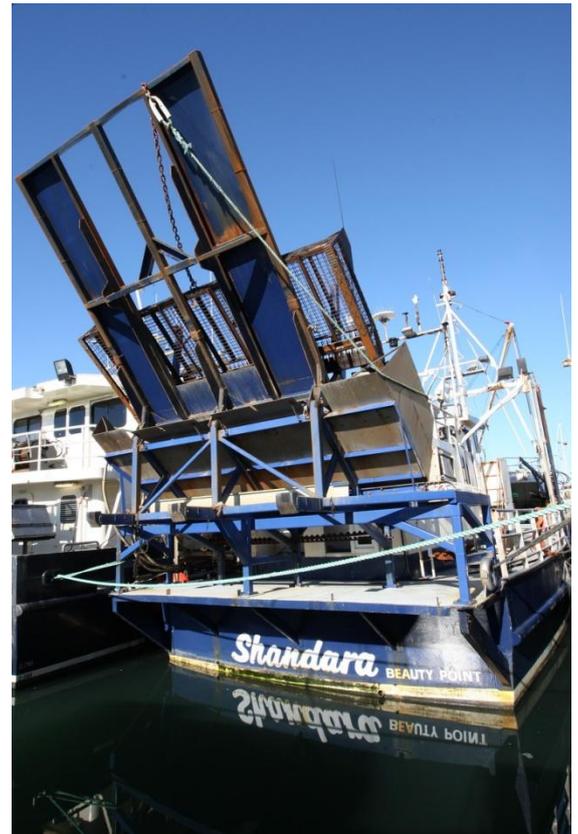
The Yanmar 6AY-STE is factory approved for maximum throttle opening up to 24 hours of continuous operation. The engine is backed by Yanmar to operate for up to 4000 hours a year at full power.

While the power was more than that needed for the hull, John Hammond was after a big engine that he could run well below maximum output. This he reasoned, would extend the life of the engine and also give him the option of pushing the throttles down hard should the need arise. The logic behind the engine selection has proven to be well founded.

The Yanmar 6AY-STE was physically bigger and heavier than the original engine in Shandara. For this re-power the entire engine room was gutted. The engine beds were reinforced to take the additional weight, torque and power output of the Yanmar. Access to the engine room for the job was achieved by cutting out a panel in the side of the hull.

The Yanmar re-power project provided John Hammond with the opportunity to make a few other changes in the engine room. A new dry exhaust system fabricated from stainless steel was installed.

Also, a new Yanmar generator set comprising a Yanmar 4TNV98T with a 45 kVa alternator was installed in the engine room. The generator set is the sole source of electrical power on board, driving the deck lighting at night, pumps, refrigeration and four hydraulic motors for scalloping.



Three months after slipping the hull, Shandara was re-powered and back at work. The original 72" prop with steerable nozzle was retained. A new Twin Disc transmission was installed, but the ratio was changed from the original 6:1 to 5.03:1

Following the re-power, the transformation has been remarkable. With the old 350 hp engine fitted in Shandara, the cruise speed was 8 knots with fuel consumption logged at between 45 and 50 litres per hour.

With the Yanmar 6AY-STE installed, a similar cruise speed of 8 knots is achieved at 1150 rpm with fuel consumption now reduced to just 30 litres per hour. That's a fuel saving of up to 20Lts per hour. When cray fishing the fuel consumption is even less.

"I frankly didn't believe the fuel consumption figures that were being quoted before I re-powered with Yanmar," John Hammond said. "Now that I have experienced the savings myself, I'm truly amazed."

"With the extra power of the Yanmar 6AY-STE on tap I can run Shandara up to 11 knots if I need to. It's good to know that I have the power and extra speed on tap if I need to catch a tide or beat some of the other boats back to the wharf and unload first."

On a typical scallop fishing trip, Shandara will be gone from her home port of Triabunna for between 30 and 40 hours. Scallop fishing involves a heavy steel cage being pulled across the sea bed, an activity which demands the Yanmar engine to operate under heavy load for virtually the entire time at sea. A West Coast cray fishing trip generally involves two to three weeks at sea.

Over the 13,000 hours of operation, John Hammond has performed nothing more than routine maintenance.

“There’s not a drop of engine oil in the bilge and apart from oil and filters I’ve never needed any parts,” John Hammond said.

“When my other commercial fishing boat is ready for re-powering, it will definitely be a Yanmar.”

---

**Relevant web links:**

Power Equipment

[www.powerequipment.com.au](http://www.powerequipment.com.au)

Yanmar 6AY-WET

<http://www.powerequipment.com.au/products/sailing-engines/commercial-engines/6ay-series-659-911mhp/>

---

Power Equipment is the exclusive and authorised Australian, New Zealand, Papua New Guinea and South Pacific Distributor of Yanmar Marine and Industrial diesel engines, JCB DieselMax, MASE diesel marine generators, Gori high quality folding sailboat propellers, PSS Shaft Seals, and Northern Lights Gen Sets.

---

**For more information contact:**

Michael Blair

National Marine Sales Manager - Australia

**Power Equipment Pty Ltd**

**Tel:** (07) 5644 9600

**Fax:** (07) 5644 9644

Email: michael.blair@powerequipment.com.au



**EDITOR'S NOTE**

Download this release and pictorial from

**connexionpr.com.au**

To register for the email distribution service  
contact [admin@connexionpr.com.au](mailto:admin@connexionpr.com.au)