

# Chantey

NEWSLETTER FOR YAMAHA MARINE DEALERS

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Chantey  
Special

## Yamaha power for Emirates Team New Zealand's chase boat

### Outboards that exceed the design goals

A new set of rules were put in place for this America's Cup, allowing for competing teams to use larger 72-ft. catamarans that can reach speeds of up to 40 knots on the water, faster than ever before. Taking these new requirements into account, chase and support boats that can keep up with these new multi-hulled contenders are now a necessity.

Emirates Team New Zealand looked to local boatbuilding company Salthouse Boat Builders to construct their newly designed chase boat from scratch. YMNZ has had a long, supportive and successful relationship with Salthouse, supplying reliable, high-performance Yamaha outboard motors for the racing and chase boats they build for various teams. The rule changes would require the chase boat to have engines that are not only capable of impressive speed, but have great reliability, low fuel consumption and light weight. To meet this unique

new challenge, Salthouse once again chose Yamaha outboard motors to power this new chase boat, using a rig of four F300B V6 4-stroke outboards.

Despite a massive total output of 1200 hp, the F300Bs are the lightest offshore marine outboards available in their class and the reported fuel consumption for each engine at mid-range cruise speeds (about 30 knots) is only 25 L/hr. This means that in addition to its speed, the chase boat has an exceptional operational range of 510 nautical miles, allowing it to provide dawn-to-dusk support for the New Zealand team during the testing period.

These kinds of support activities at the highest level of competition are thanks to the relationship of trust YMNZ Marine Manager Greg Fenwick and his team have built with dealers and the marine industry over the years and play an important part in the considerable market share Yamaha enjoys in New Zealand today.

First awarded in 1851, the America's Cup is said to be the world's oldest active international trophy in sport. Competition for the 34th holding of this prestigious event is already underway with the AC World Series and will lead up to the Louis Vuitton Cup to determine the challenger for the AC Finals in San Francisco in September 2013. The island country of New Zealand is no stranger to marine sports and leisure and has been a strong contender for the America's Cup, taking the trophy home in 1995 and 2000. With at least half of the market share for outboard motors in the country, Yamaha group company Yamaha Motor New Zealand Limited (YMNZ) is on the scene, supporting Emirates Team New Zealand in their bid to take home the America's Cup next year.

At 45-ft. in length, the chase boat boasts an impressive top speed of 58 knots



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Yamaha technicians from Japan provided outboard motor maintenance and support

In 2003, New Zealand was the host country for the 31st America's Cup



The country of Suriname, formerly known as Dutch Guiana, is the smallest country on the South American continent. It is also a multi-ethnic nation with citizens who trace their ancestry to India, Indonesia, and China and to ethnic groups such as the Suriname Creoles. The country's economy is largely dependent on the mining of mineral resources (primarily bauxite) makes up over 80% of total exports. As the sole distributor of Yamaha outboard motors in this country, Datsun Suriname N.V. is dedicated to growing its customer base and constantly improving the service and customer support Yamaha users receive.



## Transport-use customers choose Yamaha outboards

The majority of overall outboard motor demand in Suriname is for transport-use. As of 2011, annual sales of Yamaha outboards total approximately 1,200 units. This represents one of the largest sales volumes in the Caribbean region, and Yamaha outboards are said to command a roughly 85% domestic share in Suriname. The largest part of the demand volume comes from transport boat operators on the Suriname and Maroni (Marowijne) rivers and others. The mainstream models are 2-strokes in the 40 hp to 115 hp range. Particularly along the Suriname River and its tributaries, with the exception of the area around the capital of Paramaribo near the river mouth, the undeveloped road network leaves boats as the only form of transport. With their reputation for great durability, light weight and compactness, Yamaha outboards are the overwhelming choice of transport boat operators. As for fishermen who work the fishing grounds along the country's Caribbean Sea coast, the most frequently seen power rig is a pair of outboards at 80 hp or larger. Overall, the majority of outboard motors in Suriname are used for business and/or commercial use.

*Tourist boats that give dolphin-watching tours. These are the typical type boat used on the lower stretches of the Suriname River*



*Fishing boats that operate in the Caribbean coastal waters. Many midsize outboards are seen here*



*The most frequented stop on the Suriname River is the port of Atjoni and 60 to 80 boats dock here*



*Long, slim wooden boats like these handle much of the transport work*



*A large volume of outboard demand is concentrated along the Suriname River and regularly held service campaigns like this provide after-sales follow-up for customers. On some days, as many as 50 outboards and 30 generators are checked*

## Raising customer satisfaction by strengthening the sales and service network



*Datsun Suriname N.V. has its main store in the capital of Paramaribo. Demand here is high for lightweight 2-stroke outboards*

According to Datsun Suriname N.V. Director, Ms. Kelly Hwang-Jong, until now the company has concentrated on service campaigns as the main form of after-sales follow-up for customers, but from now on they will be adding efforts aimed at reaching out to give



*Datsun Suriname is headed by Kelly and her husband Michael. Michael holds a picture of his father, the founder of the company*

even more customers thorough knowledge about their products and how to use them properly. To strengthen the company's user support system, plans are in place to strengthen the network of branches around the country in ways that will bring greater convenience and accessibility to the users. Also, the company is working to make the repair and support system function more smoothly by ensuring that customers have used their outboards properly. This strategy involves holding training and educational courses for the company, dealer staff and the users themselves in order to impart fuller understanding of the products and how to use them. Through these efforts, Datsun Suriname is differentiating the Yamaha brand from its competitors and winning solid trust and loyalty from customers. The company hopes to create a positive cycle where existing customers will recommend Yamaha products to other users.



# How to check the tightening torque on a bolt

In our “Advice from a veteran mechanic” series this time, we talk about how to check the tightening torque on a bolt.

One of the ways mechanics check the tightening torque of a bolt that is already tightened is to loosen the bolt and measure the torque at the moment when the bolt begins to loosen. This method is based on the assumption that the tightening torque is the same as the torque when the bolt starts to loosen. But, is this assumption correct? This time, we talk about the methods for checking tightening torque, including the one mentioned above.

## How do you check the torque of an already tightened bolt?

Generally, there are three methods:

### 1) Crack-off method

Start loosening the tightened bolt with a torque wrench and check the torque reading at the moment it begins to turn.

### 2) Crack-on method

Use a torque wrench to further tighten the tightened bolt and check the torque reading when it begins to turn.

### 3) Marked fastener method

Make the marks at the tightened bolt's original position, making sure the marks on the bolt and the base line up. Then, loosen the bolt and tighten it again, checking the torque at the point where the bolt reaches the marked position.

1) Crack-off method



2) Crack-on method

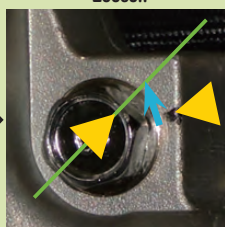


3) Marked fastener method

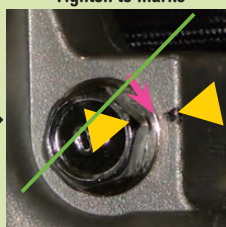
Make marks



Loosen



Tighten to marks



## How do you check the torque of an already tightened bolt?

Let's try these three methods four times and compare the torque readings we get.

	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>
1) Crack-off method	16.1	15.2	14.5	17.1
2) Crack-on method	17.9	18.3	17.8	17.0
3) Marked fastener method	16.5	19.6	17.1	19.4

<using an F115A starter motor bolt tightened at 18 Nm>

As the chart shows, all three methods produce readings with some deviation with each try. However, when we compare the results of the three methods with the original tightening torque, we see that there is a difference in their accuracy. So, let's compare the results to the original tightening torque by taking an average of each method's results and dividing that “measured torque” by the original tightening torque.

	Average	Measured torque/tightening torque
1) Crack-off method	15.73	0.87
2) Crack-on method	17.75	0.97
3) Marked fastener method	18.15	1.01

It is generally said that the ranges of deviation of measured torque/tightening torque for the three methods are 1) 0.6 to 0.9; 2) 0.9 to 1.2; 3) 0.9 to 1.1, and in fact, our measurements all fall within those ranges.

However, regardless of the method used, the important thing is knowing what method the measurement was taken with. If the method of measurement is clearly known, as with the measurements we made here, it is possible to estimate what the original tightening torque was. Conversely, if you don't know what method was used to get a measurement figure, you can't make a meaningful estimate.

## It is important to make sure what tools and methods were used to get a measurement

This time, we talked about how different methods for checking/measuring tightening torque produce different results. In measurement, you must always make sure what tools/instruments and methods were used to get the measurement. For example, in the case of measuring the length of a pencil, the reliability of the measurement will be very different depending on whether it was simply a visual estimate or if it was measured with a ruler, vernier caliper or a micrometer.

And, if you plan to use a measurement you have been given, if you don't know how the measurement was made, you won't be able to judge how reliable it is. So, a very important point when working with measurements is knowing these facts.

Dr. Sugimoto Chantey Editorial Room

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## The appeal of offshore fishing

I have experienced offshore fishing several times in the waters off places like Louisiana and Florida, but the single experience I enjoyed most was fishing for tuna offshore from Venice, Louisiana. When you think of big game fishing, swordfish is one of the catches that often comes to mind, and though the experience may be unequalled in terms of the size of the fish and the adventure on the high seas, when it comes to eating, tuna is surely the best (Everyone knows how much we Japanese love tuna!). Depending on the type, tuna can range in size from about 60 cm to up to three meters in length, and it's said that they swim at speeds of up to 80 km/h. So, I'm sure you can imagine what an exciting experience it is to have such a fish hit your lure and run with it.

For me, few things can match the anticipation and excitement of taking a boat offshore in search of big game fish. Out on the waves, you put all your strength into casting a big lure out from the boat again and again. Since tuna is not a fish that is easy to get a hit from, it is hard to put into words the excitement when that big strike does come. Once hooked, the tuna swims with all its might to escape the angler's trap. It becomes a one-on-one showdown and with a large fish, it may take more than an hour of fighting to finally land it on board. Of course, it is a fight that the angler may well lose with a broken line or the like. To tell the truth, fishing itself is like a spiritual or ascetic activity. But, it's offshore fishing that offers the most chances of getting that one big catch you will never forget. That sense

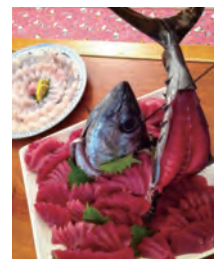
# Sport Angler Kurt on “Enjoying sport fishing”

I enjoyed a variety of different kinds of fishing while I was working in North America and I can say that offshore fishing was one kind that I always looked forward to because it brought the possibility of an encounter with some really big game fish. In this issue, I would like to talk about that kind of offshore fishing.



of accomplishment may be why so many of us otherwise serious adults get hooked on this sport of angling. In America, I was often told that “freshwater bass fishing and other inshore fishing is ‘fun fishing,’ offshore fishing is ‘experience fishing.’” I certainly agree with that analysis.

I always remember to thankfully receive the blessings of the sea and the fish it gives us, and the sashimi from the tuna I worked so hard to catch was truly delicious!



## A shift from large inboard sport fishing boats to fast outboards

The boat we used for that offshore tuna fishing was a 39-ft. center console boat mounted with three Yamaha F350

outboards, or what is sometimes called an SKA (Southern Kingfish Association) tournament type high-speed center console boat. To find tuna, it was fitted with a large-screen GPS fish-finder and radar, and we used signs like flocks of birds over the water and the schools of small fish that tuna prey on. In the past, the principle style of offshore fishing was done by trolling with a large inboard-powered boat with a cabin and equipped with fighting chairs. However, because of the slower cruising speed of that type of large boat, it was common to sleep on board the night before and then leave port for the fishing spot very early in the morning. Of course, there are many anglers that still fish in that style, but the trend today is to use high-speed center console boats. Since these boats are about twice as fast as inboards, if you

are joining a tournament for example, you have the speed to get to the fishing grounds with a normal early morning start. The high-speed boats are also considerably smaller and can be handled by fewer people, which make them more economical because there is no need for a large crew. What's more, I personally prefer casting to trolling as I find it a more interesting way to fish. Probably a lot of anglers feel the same way. While a fighting chair is necessary for bringing in a very large fish like a marlin, the trend today, particularly for younger anglers and those up into their 50s with the strength to do so, is to fish standing regardless of whether you are casting or trolling.

For reasons like these, there are a growing number of boat users who enjoy fishing that are trading in their 50- to 60-ft. class inboard boats that used to be the mainstream and switching to 36- to 42-ft. class center console boats. Today, sales of larger boats with outboard motors continue to be strong in the U.S. market.



# News Round Up

Activities from distributors around the world, and more

## Student-focused program opens opportunities as future Yamaha technicians

Group company Yamaha Motor Australia Pty Limited (YMA) is running a program in cooperation with local dealers, partnership brokers and high schools in Sydney and Brisbane, for 9th and 10th grade students to compete in a Yamaha Student Grand Prix. The goal is to raise interest among Australian youth in future careers as Yamaha technicians. Modeled after the Yamaha Technical Academy's World Technician Grand Prix, this program gives students the chance to experience what it is like to be a Yamaha technician. Students first visit a local technical and further education (TAFE) college, where 15 to 20 of them are chosen to proceed to the next



stage. This consists of a day at the Yamaha Training Center, where they learn various service-related skills and are evaluated on their attitude and performance. Finally, four or five students are chosen to represent their schools at regional Student Grand Prix competitions. YMA hopes that this program and others like it will bring more awareness to high school students of the future career opportunities to be had in the motorcycle and marine industries.

From Martin Dwyer, Yamaha Motor Australia Pty Limited (YMA)



## Engaging with Communities in Mexico

Yamaha group company Industria Mexicana de Equipo Marino, S.A. de C.V. (IMEMSA) teamed up with official Yamaha distributor Implementos El Pescador S.A. de C.V. to connect with customers and introduce Yamaha's 4-stroke outboard motors through community-focused promotional events. In the small coastal town of Puerto Angel, Mexico, some 400 people came together on August 5th (locally celebrated as "Fisherman's Day") for a Yamaha-hosted day of family fun, games, seafood, fishing competitions and prizes. In Mexico, Yamaha is currently running a program targeting the commercial-use market to promote switching from a 2-stroke to a 4-stroke outboard engine. Implementos El Pescador's President Carlos Zarate was present, showcasing the quality and durability of the 4-stroke engine for the local fishermen by

exhibiting an F40 outboard motor that ran with no breakdowns for 10 years. Parents and their children also enjoyed a day of fishing games and competition, winning prizes like Yamaha t-shirts, life jackets and more.

On a different day, Implementos El Pescador also ran a fishing tournament just for children in Huatulco. A total of 152 of "tomorrow's customers" competed to win prizes provided by the dealership, the head of the local coast guard and the state government like a Yamaha keyboard, a bicycle and more.

(A video of this event can be seen at <http://www.youtube.com/user/videospescador>)

From Shouji Nagai, Industria Mexicana de Equipo Marino, S.A. de C.V.



### Editor's Note



The sailboat is humankind's oldest form of transportation, and it is still evolving today. In the America's Cup race, multi-hulled boats have become the new standard since around 2010. As the race is competed by these faster new boats, the chase boats that support them during the competition are also evolving constantly. In this world-class race where cutting-edge technology is the norm, the latest Yamaha outboard motors and rigging components powering the teams' support boats have a strong reputation for performance and reliability.

**YAMAHA OUTBOARDS WEB SITE** <http://www.yamaha-motor.co.jp/global/consumer/outboards/index.html>

**WAVERUNNER FAN SITE** <http://www.waverunner-fan.com/>

**Yamaha Outboards Channel is online on Youtube**

View waterside scenes and scenes of Yamaha outboards in use around the world

**Yamaha Outboards Channel** <http://www.youtube.com/user/Yamahaoutboardmotors>