

Chantey

NEWSLETTER FOR YAMAHA MARINE DEALERS

December 2017

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English Version



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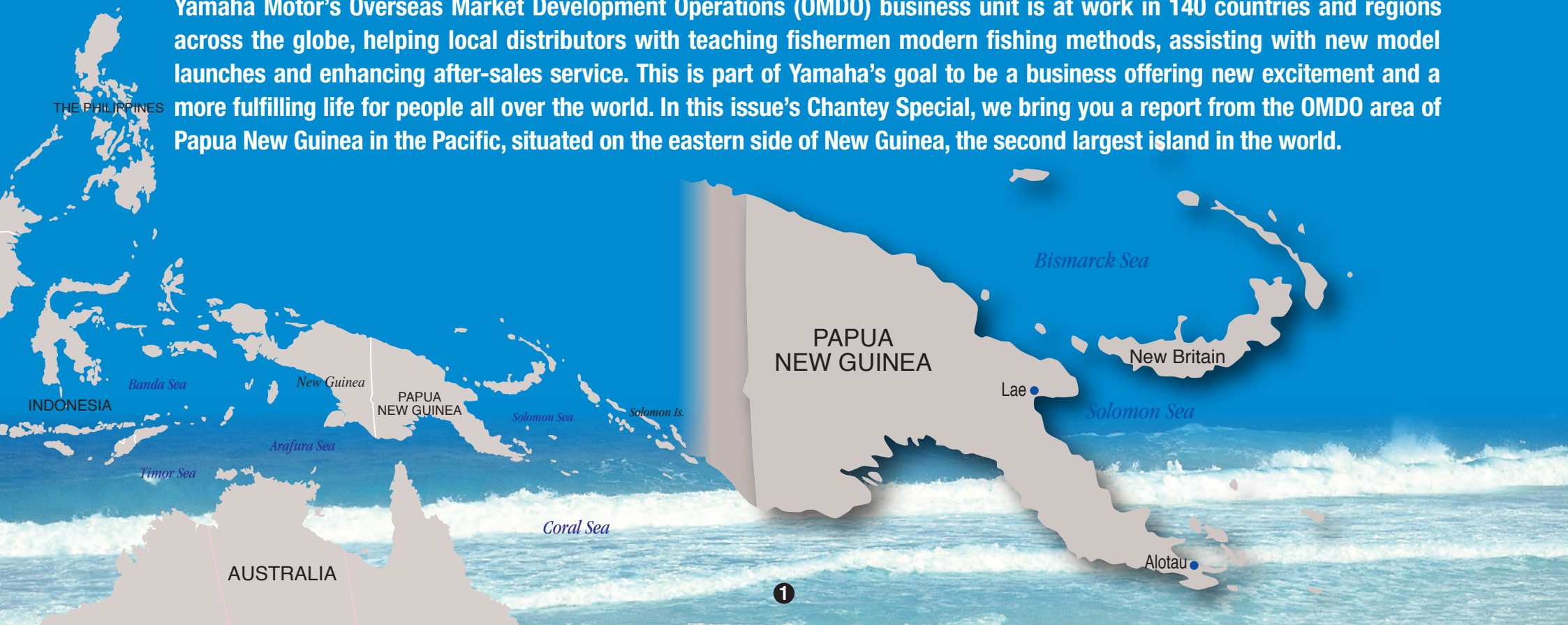
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YAMAHA MOTOR CO., LTD., Marine Business Operations, 2500 Shingai, Iwata, Shizuoka 438-8501, Japan

Chantey
Special

Getting Manufacturing Back Up to Speed in Papua New Guinea

Yamaha Motor's Overseas Market Development Operations (OMDO) business unit is at work in 140 countries and regions across the globe, helping local distributors with teaching fishermen modern fishing methods, assisting with new model launches and enhancing after-sales service. This is part of Yamaha's goal to be a business offering new excitement and a more fulfilling life for people all over the world. In this issue's Chantey Special, we bring you a report from the OMDO area of Papua New Guinea in the Pacific, situated on the eastern side of New Guinea, the second largest island in the world.



Chantey
Special

Getting Manufacturing Back Up to Speed in Papua New Guinea

Yamaha has enjoyed strong market share in Papua New Guinea (PNG) and an increasing demand for Yamaha boats. This success has been shared in conjunction with a long-running 30-year relationship with Samarai Plastics Ltd. (Samplas), a boat factory supplying craft under contract exclusively for Ela Motors.

PNG relies heavily on water transportation as there are no major highways inland that allow for ground transport, so Yamaha dinghies—as they are known by locals—are the lifeblood of the transportation industry. You will see everything from people and fuel drums to market produce, fish and even vehicles being transported in creative manners across the water in PNG. Over 100 Yamaha boats and outboard motors are sold by Ela Motors each month to fulfill and sustain the needs of the local people. Without boats, people would be left with more traditional—and sometimes dangerous—modes of transport such as “dugout” timber canoes moved by paddle power, or sometimes having to sail to destinations around the mainland and surrounding smaller island regions.

The Samplas boat factory was founded in Alotau in southeast PNG and employed up to 80 employees until October 27, 2016 when a tragic electrical fire burnt the factory to the ground. Boat molds, plant equipment, material stock and a large volume of new boats were taken by the blazing heat of the fire. Ela Motors responded to the crisis rapidly by supporting Samarai Plastics’ efforts to build an interim factory in Alotau whilst they began constructing a new purpose-built factory in Lae, the second largest city in PNG. This facility was also aimed at



bringing boat manufacturing into a new era in PNG. The interim factory quickly went about reconstructing molds and commencing some low volume production while the new facility in Lae was being built by Ela Motors. Utilizing some existing unused infrastructure, a basic factory commenced low volume production in July 2017, just nine months after the fire. It was quickly identified that the prevailing elements of wind and sun in were not compatible with the infrastructure utilized, and a new

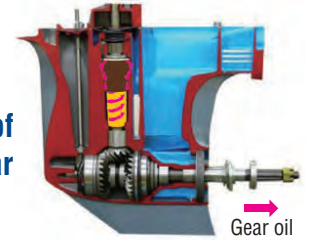
roof is now being constructed to allow for a more efficient production line, scheduled to be completed by the end of 2017. This new factory will not only help pave the way for fulfilling the growing demands of boats throughout the country, but also meet current boat demand and facilitate new opportunities for export sales.

From Dan Power, General Manager, Yamaha Operations, Ela Motors



Gear Oil

Gear oil is the oil that lubricates the parts in the lower unit of an outboard motor. The gears in the drive unit are subject to high levels of contact pressure and sliding velocities as they mesh, creating extremely harsh use conditions. Because of this punishing environment, gear oil requires high resistance to extreme pressures to ensure the lubricating film doesn't break down and result in gear seizure.



Types of Gear Oil

Gear oils are classified by the American Petroleum Institute (API) using Gear Lubricant (GL) ratings. The higher the GL rating, the more extreme pressures the oil can withstand. The drivetrain of an outboard motor typically uses oils rated as GL-3 or higher, but each outboard type has a designated grade of oil that should be used.

Gear oil contains extreme pressure (EP) additives based on either sulfur or phosphorous for excellent anti-wear and anti-seizure properties. The higher the grade of the oil, the higher the percentage of these additives it contains, like how GL-4 oils are superior to GL-3 oils and GL-5 oils are superior to GL-4 oils in terms of performance under extreme pressures and for wear resistance.

API GL Rating	GL-3	GL-4	GL-5
Amount of EP additives	Low	High	
EP performance/wear resistance	Low	High	

These chemically active compounds firmly cling to the metal surfaces, causing a chemical reaction with the metals that enables the formation of the protective lubricating film that handles extreme pressures. An excessive amount of these chemicals in the additives can have potentially adverse effects like damaging the metal surfaces, and that's why the designated oil for each outboard is selected with consideration for these factors.

Using an oil with a lower grade than specified can cause seizure, while using one higher than specified can cause an undesirable buzzing sound. One might think that there won't be any problems by just using a GL-5 oil for any case, but a higher rating doesn't mean an oil is of higher quality or will deliver better performance, so be sure to use the grade specified in the Owner's Manual.

Cloudy Gear Oil

When changing the lower unit gear oil, the oil from the outboard may appear clouded or milky white. This is because water has gotten into the drive unit and been stirred into the oil, causing it to turn milky white. The reason for water entering the drive unit may be one of the following:

1. Poor sealing of the propeller shaft (damaged oil seal)
2. Poor sealing of the drain screw (loose plug or damaged gasket)
3. Poor sealing of the oil level plug (loose plug or damaged gasket)
4. Poor sealing of the driveshaft assembly (damaged O-ring or oil seal)
5. Poor sealing of the shift rod assembly (damaged O-ring or oil seal)

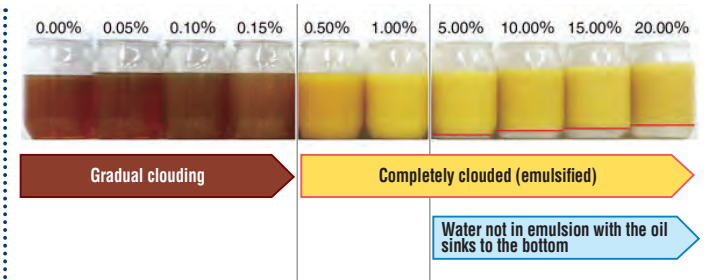
In the case of failed propeller shaft oil seals, the first possible cause to look for is damage to the seal lips due to fishing lines or other debris tangled on the propeller shaft. Regarding the gaskets for the drain screw and oil level plug, they are tightened during installation to the point they are crushed and deform to form a more airtight seal, so they should never be reused. Always replace them with new ones.

Oil that has become milky due to water intrusion cannot maintain its lubricating performance, which can lead to gear damage, bearing seizures and the like. When changing gear oil, remember to check the old oil's color, viscosity, etc., for signs of water intrusion or other anomalies.

Cloudy Oil Depends on the Degree of Water Intrusion

Can we visually tell how much water has entered the oil by how discolored it has become? The photo at the right shows the visible change in new gear oil as increased amounts of water are mixed in.

Although the conditions are somewhat different when water enters a running drive unit, when water is mixed into the oil even in small amounts, it becomes increasingly clouded. Even when the oil contains just 0.5% water by volume, it takes on a whitish, clouded appearance as the mixing continues.



*These samples show the state of the oil 48 hours after the water is mixed in.

When this is put in terms of the amount of gear oil specified for an outboard drive unit, it would take just 2cc of water stirred in by the gears of an F30B (oil volume of 430cc) and only 8cc for a big outboard like the F350A (oil volume of 1,520cc) to cause this degree of cloudiness. Once you confirm that water has entered the oil and clouded it to a whitish appearance, the lower unit must be disassembled and thoroughly cleaned, or the oil system must be flushed repeatedly until all of the water is completely removed. Otherwise, any water remaining from the fouled oil will cause the same thing happen again when run through the drive unit.

Also, changing the oil just after the outboard has been tilted up out of the water (when there is often still water around the drain screw or plug), changing it when the outboard is exposed to rain or spray from waves, etc., are situations where small amounts of water could easily mix in with the oil and lead to it clouding up.

Unlike with engine oil, you can't expect water that gets inside the drive unit to evaporate due to the heat generated when the outboard is running. Any water that gets in the drive unit will stay there, so take great care to prevent any from getting in when changing gear oil.

Please be sure to always conduct oil changes using the specified types of gear oil at the designated intervals using the proper methods.



Kurt Goes Fishing Down Under



Australia Entry #4

My Dream Catch Since Childhood

This will be the final entry of my “Kurt Goes Fishing Down Under” series. For a target fish befitting this final story, I went straight to the top of my list of dream catches—the barramundi, meaning “large-scaled river fish” in the language of Aboriginal Australians.

The barramundi is one of the most sought after sport fishing targets in Australia. It has frequently been highlighted on fishing TV programs in Japan and become a dream target for many Japanese anglers as well. I’ve personally been hoping to catch a barramundi for some time, and I even purchased specialized fishing lures and gear for catching it in Japan before I moved to Australia. So, I got that gear out of my tackle box and reserved a fishing guide service from the In & Outboard Marine dealership in Darwin—a mecca for barramundi angling. The trip to Darwin was long, but I was finally off to attempt to catch this dream fish of mine.

The fishing method I used this time was trolling. I used a special diving lure for barramundi to troll with behind the boat. However, rather than setting the fishing rod in a rod holder and waiting for a strike as with other types of troll fishing, the trick with barramundi is to hold the rod and keep jigging the lure as you troll to attract the fish. Trolling along a shore where crocodiles napped in the sun, I kept working the lure to attract a barramundi strike until suddenly—with zero warning—the rod arched sharply downward. The next second I heard an explosive splash behind the boat and saw the fish break the surface. It was definitely a barramundi! I



kept telling myself to stay cool—my heart was already racing—as I lowered the end of my fishing rod into the water to keep the fish from jumping anymore and breaking free. The fish continued to struggle even after I’d reeled it in alongside the boat, and I had to continue to work it carefully until we could finally get a net under it and land it. I pumped my fist in the air in triumph! My childhood dream finally came true!

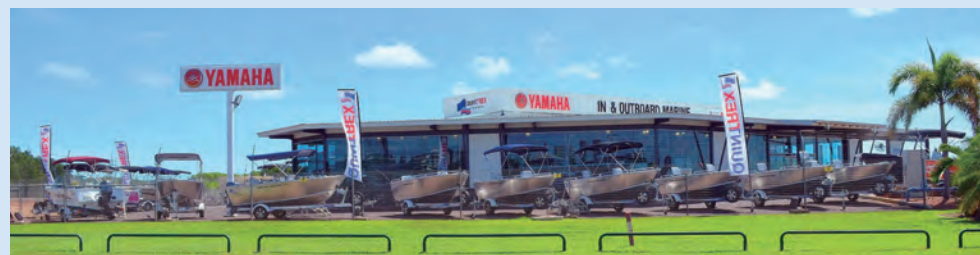
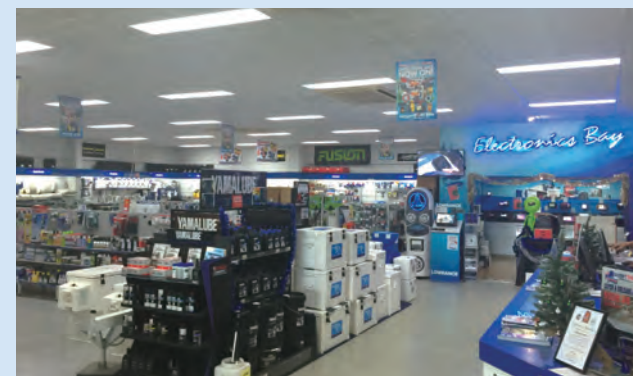
In closing, I would like to say a heartfelt thanks to Stuart and Brad from In & Outboard Marine for their support on one of my most momentous fishing trips.

Kurt Takayanagi, YMA

The Dealer That Helped Kurt Land His Dream Catch

Located right by the water in the coastal capital city of Darwin in Australia’s Northern Territory, In & Outboard Marine is a Platinum Yamaha dealership and one of the biggest in the country. The dealership was established in 1984 and began its partnership with Yamaha in 1987, and today stocks a large range of Yamaha 2-stroke and 4-stroke outboards. Over its 30 years in business, In & Outboard has won multiple awards for its services and excellence, including a Yamaha Marine Technician Grand Prix winner in 2006 and its current Platinum Dealer status. As mentioned by Kurt Takayanagi in his final fishing entry, they also provided fishing guides to help him land his barramundi dream catch.

For its high level of customer service and their numerous contributions to marine recreation in Australia, In & Outboard Marine is recognized as one of the best marine product dealers in the country and we hope to continue this winning partnership for many years to come.



News Round-up

Activities from distributors around the world, and more

Top Dealers from China Visit the U.S.

From November 20 to 21, 2017, a roughly 50-person group of presidents and employees from dealerships in China that achieved top sales results were invited to the U.S., where they attended a China Dealership Meeting held in Atlanta. At the meeting, representatives of Yamaha Motor China Co., Ltd. (YMCN) presented a review of the year and announced the company's policies for the upcoming year. The group also visited Yamaha Motor Manufacturing Corporation of America (YMMC), where WaveRunners are built, and Yamaha Jet Boat Manufacturing U.S.A., Inc. (YJBM), where Yamaha Sport Boats are manufactured. The group listened intently to explanations about the factory histories and the various manufacturing processes as they toured the facilities. At YJBM they

were also given test rides on the 242X E-Series and the AR195, which served to deepen their understanding of the products and their qualities. The event as a whole proved to be an inspiring and motivating experience for the sales representatives as they prepare for next year. We hope these dealers will do an equally excellent job next year as well!

From Ayano Mabuchi, 1st Marketing Div., Marine Business Operations, YMC



Eduardoño Dealer Trip to Japan

In celebration of their 70th anniversary, Colombian Yamaha Motor marine product distributor Eduardoño SA organized a trip to Japan for select dealers in November 2017 to boost their morale, further instill the 3S business philosophy and encourage increased warranty registrations. The dealers on the trip were those that finished in the top ten of Eduardoño's 2016 sales contest.



The roughly week-long trip began on November 8th and the itinerary not only gave the dealers the chance to experience Japanese culture firsthand, but also included a visit to Yamaha Motor, where they were greeted with a welcoming party, taken on a factory tour and more. Participants said that experiencing Japanese culture, meeting people at Yamaha, and touring the factory was a motivating experience that they will use going forward, and that the kind reception and treatment they received from their Japanese hosts was moving. The YMC contingent themselves found the sincere desire of the dealers to learn about Yamaha and Japanese culture a good indication of why they were in the sales contest's top ten.



All the participants agreed that the trip had strengthened the sense of unity between the dealers, Eduardoño and Yamaha. We'd like to thank everybody involved for making the trip a resounding success.

From Jin Matsuno, 1st Marketing Div., Marine Business Operations, YMC

Editor's Note



Another year is finally coming to an end. I hope you all enjoyed reading *Chantey* and gained some useful information for your marine business. We would like to thank you for taking the time to read our articles and a big thank you to everybody who sent news stories to us. Yamaha Motor wishes you all a Happy New Year!

YAMAHA OUTBOARDS WEBSITE → <https://global.yamaha-motor.com/business/outboards/index.html>

WAVERUNNER WEBSITE → <https://global.yamaha-motor.com/business/waverunner/>

Yamaha Outboards Channel on YouTube

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

Yamaha Outboards Channel → <https://www.youtube.com/user/Yamahaoutboardmotors>