

Chantey

NEWSLETTER FOR YAMAHA MARINE DEALERS

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YAMAHA MOTOR CO., LTD., Marine Business Operations, 1400 Nippashi, Minami-ku, Hamamatsu, Shizuoka 432-8528, Japan

Chantey
Special

Get to know Yamaha's 4-stroke outboards

New graphics symbolize Yamaha's cutting-edge innovation, reliability and durability

Since the launch of the first Yamaha 4-stroke outboard motor in 1984, the lineup has been expanded to now include models ranging from 2.5 to 350 horsepower. What's more, when you include detail spec variations on these models in areas like transom length, tiller handles, remote control units, starting systems, etc., to fit specific uses or use environments and different types of boats, Yamaha offers the industry's largest number of variations, at more than 180. It is also important to note that Yamaha also offers models specifically for commercial use in the 20 to 200 horsepower range.

Yamaha 4-stroke outboard motors are designed and engineered with the same dedication to durability, reliability, light weight and compactness that Yamaha 2-strokes have long been famous for. Another thing that sets our 4-stroke outboards apart is the high level of environmental performance Yamaha engineering has achieved by developing on the inherent 4-stroke strengths of cleaner running performance and quietness and taking them to new levels.

Of course, these 4-stroke models feature the latest in Yamaha exclusively developed technologies like Variable Camshaft Timing (VCT), long intake manifold designs, the Blow-By Gas Re-burning System, the Yamaha Diagnostic System

(YDIS) and variable trolling rpm control. With the latest V6/4.2 liter series models, you will also see big advances in weight reduction compared to our previous big horsepower models. This kind of advanced Yamaha engineering was officially recognized when the F250C model of the VMAX SHO series for bass boats, released just before the new V6s, received the coveted Innovation Award from the US's National Marine Manufacturers Association in 2010.

For 2011, Yamaha rolled out new graphics for all of its 4-stroke series models. Models with these new graphics will surely spread worldwide as symbols of the high performance, outstanding reliability and durability and eco-friendliness of Yamaha 4-strokes.



Yamaha 4-stroke outboard development, a history of technological innovation and environmental measures

Born in 1984 - the first Yamaha 4-stroke outboard motor

After winning a strong reputation as a builder of reliable 2-stroke outboard motors, Yamaha outboards began to win recognition as one of the world's leading brands thanks to the quality of its technological innovations to make engine performance more eco-friendly. During the 1990s, developed nations led the way in introducing regulations to limit the environmental impact of products, as exemplified by the emissions regulations adopted in the USA. This forced the outboard motor makers to direct their development efforts toward more eco-friendly engine technologies.

Prior to this trend, Yamaha had already developed and marketed its first 4-stroke outboard motor, the F9.9A, in Europe in 1984. With subsequent development, the F9.9 became the first outboard to clear the strict environmental regulations implemented in 1992 for boat engines used on Bodensee, the lake on the borders of Germany, Austria and Switzerland.

Another big advancement came in 1998 with the release of the 4-stroke model F100A powered by a DOHC 16-valve, in-line 4-cylinder engine that gave it the highest power output and best environmental performance in its class. Coming in a number of variations for specs like transom length and propeller type, this model made it possible to outfit a wide variety of different boat types around the world with 4-stroke engines. This F100A model opened the way to the development of increasingly larger horsepower 4-strokes and eventually the F350 that now tops the lineup as the flagship of Yamaha's 4-stroke outboard motors.



Surprising the world with Yamaha's big-horsepower 4-stroke outboard technology

Amid the development of increasingly large 4-stroke outboards, the epoch-making model that completely changed the image of what a big-horsepower 4-stroke outboard could be was the F225A, which at its release had the largest horsepower of any production 4-stroke outboard in the world.



In the outboard motor industry at that time, it was generally accepted knowledge that it would be very difficult to build a viable 4-stroke outboard motor of over 200 horsepower. Yamaha engineers refused to accept that assumption, however. At the time of its release, the F225A featured a number of innovative technologies and revolutionary designs, including an exclusive combustion chamber design that enabled higher power output with a smaller displacement, a 60-degree V angle and internal injectors, plus a new engine layout with what came to be called the "In-bank Exhaust System" that positioned the exhaust system inside the V bank of the cylinders for greater compactness. With this, Yamaha became the first 4-stroke outboard motor maker to try an engine layout that ran the exhaust pipes through the V bank and moved the intake system outside the block. Furthermore, by reducing the size and weight of many parts, changing the layout and using innovative new ideas and technologies throughout the engine, Yamaha succeeded in creating a 4-stroke outboard motor with higher output in a smaller package than anyone had thought possible before.

With ongoing efforts to apply new technologies in innovative designs, Yamaha succeeded in building a lineup of 4-stroke outboard motors ranging in size from 2.5 to 350 horsepower.

Then, in the autumn of 2010, Yamaha introduced its new V6/4.2 liter series. Once again, these models achieved extraordinary levels of weight reduction with new features like sleeveless cylinders made through new plasma fusion technology, all of which allowed Yamaha to build 4-stroke outboards with comparable weight to 2-strokes.



How to use a cylinder gauge – Part 4

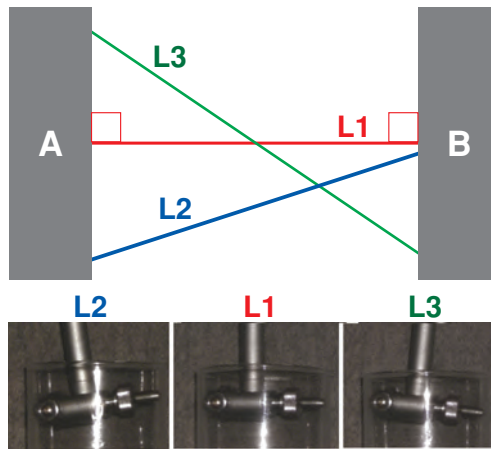
This is the final part of our series on how to use a cylinder gauge. In part three, we discussed how to set (calibrate) the gauge to “zero point.” This time we discuss how to make the actual cylinder measurement with the calibrated cylinder gauge.

Outline of the measurement process

In part three of the series, we explained that when there are two parallel surfaces like A and B in the diagram (right), and they are connected with lines like L1, L2 and L3, the correct distance between the two surfaces is shown by L1, which connects them at right angles, and also that L1 is the shortest of the three and will thus produce the smallest numerical value.

With this understood, we will now explain how to find the numerical value of L1 during the actual measuring process.

Just inserting the cylinder gauge does not ensure that it is aligned on L1, rather than alignments like L2 or L3. Therefore, after inserting the gauge, you move the handle bar back and forth slightly so it takes the gauge through a range of measurements from L2 → L1 → L3 and then back from L3 → L1 → L2. The smallest number (numerical value) shown on the gauge in this process is thus the correct



measurement (L1). This number shows how much larger the bore is from the “standard dimension” so we can calculate the actual dimension of the cylinder as we discussed in part two of this series. The Service Manual measures six points in a cylinder, so we should measure the cylinder in the same way.

Why can a cylinder gauge measure the diameter of a cylinder?

Let’s consider why the cylinder gauge can give an accurate measurement of the cylinder diameter.

Fig.1 shows a cylinder gauge inserted in a cylinder. The points a, b and c define

a triangle that contacts the cylinder at those three points. Now let’s consider the question whether the line connecting the tip of the anvil (point a) and the end of the spindle (point d) is the correct diameter of

the cylinder.

Fig.2 represents the elements in Fig.1 The triangle defined by points A, B and C is an isosceles triangle in which side A-B and A-C are

equal in length. When the line from A to D passes through point E (the middle point of the base line B-C), it must pass through the center point of the cylinder (O) as well. This means that line a-d connecting the

Fig.1

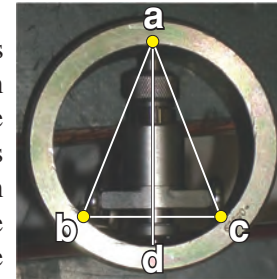
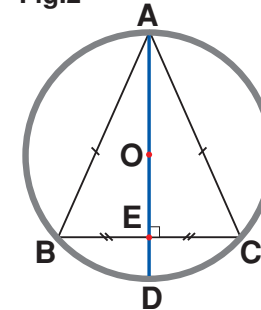


Fig.2



ends of the anvil and spindle also passes through the center point of cylinder. Therefore, the measurement made by the cylinder gauge

is indeed measuring the diameter of the cylinder and can produce a correct measurement of the diameter if the L1 defined earlier is found.

The important thing is understanding the meaning behind the measurement process

In this four-part series on using a cylinder gauge to measure cylinder bore, I have tried to discuss each of the complex processes involved one at a time in a way that explains the principles behind each process. It is important to understand the correct steps and contents of the measuring operation in order to become capable of reliable work, because in all

measuring operations, the quality of the measuring process will affect the accuracy of the resulting measurement. You may sometimes forget what to do or have some difficulty when actually performing the measurement, but knowing the purpose of each process in the operation will make you more certain in the measurement work and your results will be more accurate.

Dr. Sugimoto Chantey Editorial Room

YAMAHA MOTOR CO., LTD., Marine Business Operations, 1400 Nippashi, Minami-ku, Hamamatsu, Shizuoka 432-8528, Japan



Acquiring the fundamental knowledge of Yamaha Marine Business practices for effective marketing activities

Start of the Yamaha Sales Academy (YSA)

Looking back at the last ten years, the sudden spread of the Internet, mobile phones and changes in how information is gathered and shared have inevitably brought major changes in the approach and style of business in the marine sector as well. At the same time, there have been big changes in the customers and the way they seek and obtain information. Today's users can sit in front of a computer and look up information on not just Yamaha Motor products, but those of competitors as well. They can also find out about the customer services offered at various dealerships. Put simply, it's an environment in which it's easy to find where the cheapest stores and dealerships are. However, with the Yamaha brand we have the strengths of proven product reliability that customers trust, a strong brand image and the valuable people-to-people relationships that our distributors and dealers have built up over the years. Using these strengths, salespeople should take a proactive approach that doesn't wait for the customer to come to us, but goes to the customers with well-planned and timed sales efforts and promotions.

The Yamaha Sales Academy (YSA) is a program established and dedicated to educating new salespeople to give them the tools to make their store the best in its area. Setting clear standards for human resource development, shop development and marketing activities integrated with Yamaha's 3S (Sales, Service and Spare parts) policy, the program provides a curriculum for your salespeople to master and receive certification in. With this training, they will help strengthen your company's management foundation.

In this new Chantey series, we will introduce a portion of the know-how to be gained from the YSA curriculum, and we hope you and your salespeople will take the actual YSA course for certification as masters of Yamaha marine business practices.

Marketing Human Resource Standard



Personnel management is fundamental. In retail, no matter how great the store may be, without sufficient and functional interpersonal contact, the store's business is not likely to grow. The Yamaha Sales Academy (YSA) was created to train excellent personnel and provide support for dealership sales staff.

Marketing Department (Shop) Standard



It's important to make your store one that customers can become attached to and is easy for them to visit frequently. A well designed and organized store is one that has a good lineup of products, a well-equipped and well-organized parts department and functional and logical displays of products in the sales department. To support shop development, Yamaha Motor has created Shop Standards that start with how to create a shop identity that the customer will recognize at a glance.

Marketing Activity Standard

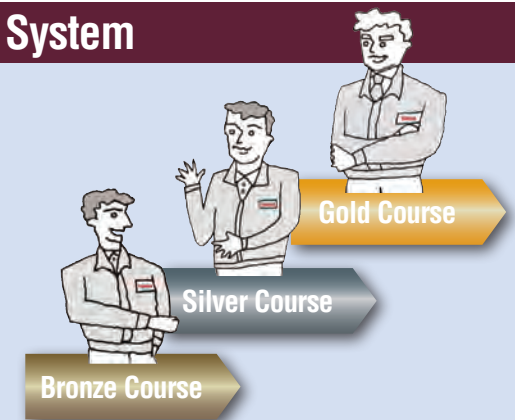


The marine market has many potential customers with needs ranging from pleasure to business use. Because of this, it is necessary to use several methods to establish and deepen communication with customers, starting with knowing how to run activities, attending to customers at the store, customer visitation and putting on events to attract new and potential customers. Yamaha offers a wide range of standards to make these activities effective through customer service work and integration with 3S activities.

The YSA Qualification System

A three-stage educational process is employed at the Yamaha Sales Academy in order to enhance the abilities of sales personnel.

- YSA uses a global three-stage qualification for staff.
- The three course levels can be taken in stages one year at a time, or in a shorter time depending on individual experience/position.
- The first step in the system is the Bronze certification, which is followed by the subsequent Silver and Gold levels (depending on the individual experience/position of the person, it is possible to begin from the Silver or Gold levels).



News Round Up

Activities from distributors around the world, and more

2012 WaveRunner model lineup presentation and YRA event

On November 18-20, 2011, Yamaha Motor Argentina S.A. unveiled the 2012 WaveRunner model lineup at Los Molinos Dam Lake in Cordoba, Argentina with the support of the Astillero Campanili dealership and held a Yamaha Riding Academy personal watercraft course at the same time.



The new WaveRunner models were exhibited and test rides were offered to show participants their new features and specifications. Customers and members of the press (magazine and televised media) attending the launch were also offered the opportunity to take a Yamaha Riding

Academy (YRA) course for personal watercraft covering theoretical instruction and on-the-water practice in riding safety, preventive maintenance, use of PFDs and other service tips as well.

Held at such an attractive venue, the event generated positive feedback and interest in the WaveRunner series while contributing to and supporting the customers, community and environmentally friendly image of Yamaha Motor's personal watercraft.

From Aldana Garategaray, Marketing Marine and Power Products, YMARG



Indonesia Outboard Dealer Meeting focuses on building customer satisfaction

Yamaha Motor's Indonesia outboard motor distributor, Karya Bahari Abadi (KBA), held a dealers meeting in the North Sulawesi provincial capital of Manado on December 1, 2011, inviting three of Indonesia's top domestic outboard motor dealers to attend. KBA made "Customer Loyalty" the theme of the meeting and gave detailed explanations of its plans and goals to increase customer satisfaction through implementation of the Yamaha 3S (Sales,

Service, Spare parts) strategy. Following up on the KBA presentation, YMC gave an explanation of the importance of customer management - the principal first step toward developing effective sales activities for a dealership. The meeting proved meaningful and left the attending representatives with heightened motivation towards fulfilling their 2012 performance goals.

From Takuya Nagatani, Marine Engine Business Unit, Marine Business Operations, YMC



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

WAVERRUNNER 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>