

#### 2010 May No. 129 English Version No. 129 English Version No. 129 English Version No. 129 Featuring the F300B/F250D/F225F and F70A Page 3: One-point Service Advice: Using a micrometer stand page 4: Customer Management Part 2: Customer management method page 5: News Round Up: Activities from distributors around the world, and more

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

# The next-generation 4-stroke outboards have arrived! Featuring the F300B/F250D/F225F and F70A

Chantev

() YAMAHA

four strake

**NEWSLETTER FOR YAMAHA MARINE DEALERS** 

New products that will lead the next generation have been added to the Yamaha Motor 4-stroke outboard lineup.

F300B/250D/F225F are 4-stroke outboard motors that provide high performance in packages designed to be the lightest outboards in the 225 to 300hp classes.



The F70A is Yamaha Motor's first 70hp 4-stroke model. The model was developed to handle a wide range of applications, from small FRP boats to relatively light boats such as aluminum and inflatable boats.

All four models achieve class-leading performance, lightness and compactness. Various Yamaha Motor technologies were incorporated to give good fuel economy, convenience, and environmental friendliness. As with the F350A, the new models also feature a futuristic exterior design.

# F300B F250D F225F



### Next generation offshore 4-stroke outboards Reducing weight to a level that rivals 2-stroke engines

- Class-leading lightness thanks to sleeveless cylinders produced by thermal spraying and aggressive use of Yamaha Motor's compact design know-how.
- Featuring a "blow-by gas re-combustion system" that separates out the engine oil component of the blow-by gas and re-directs only the fuel component back to the combustion chamber for increased combustion efficiency.
- Featuring multi-point fuel injection that supplies a precise amount of fuel into the combustion chamber at just the right moment to achieve excellent fuel efficiency and cleaner emissions.
- Idling noise reduction system and a newly designed long-span mount system that utilizes large rubber mounts to effectively reduce vibration and noise for better comfort.
  Newly developed electronic remote control<sup>\*1</sup> gives smoother and more assuring throttle operation.
- Digital gauge with high-resolution color LCD\*2
- The combination of a unique shift damper system and the Saltwater II series propeller\*3 significantly reduces the shock caused during shifting.
- \*I Remote control is an option \*2 This gauge is an option \*3 This propeller is an option

**Development Background:** These new models have been developed for saltwater use. Featuring outstanding speed and power, they were developed primarily for use on offshore boats designed for multi-engine rigs. These models are next-generation 4-stroke outboards with improved basic performance as outboards while also achieving a significant weight reduction. These models can be used for multiple-engine rigs on large boats and also come in counter-rotation versions. These new outboards can not only be used as replacements for existing 2-stroke and 4-stroke motors but also for a wider range of boat applications.

The new F300B, F250D and F225F are next-generation 4-stroke outboards featuring 4.2 liter, V6 engines. They also feature sleeveless cylinders made possible by the world's first use of thermal spraying technology on outboard motors. Use of this technology enables increased displacement for superior power and torque. It also helps achieve the lightest weight in the V6 class.







🖲 YAMAH

# **F70A**

# Yamaha Motor's first 70hp 4-stroke outboard Achieving specs that make it the ideal replacement for a 2-stroke



fresh, new look.

The F70 is a 4-stroke outboard that Yamaha Motor presents with special pride. It stands out in its class for its light weight and compactness as a 4-stroke, as well as its efficient power delivery and amazing speed and power performance.

- SOHC engine with 4 valves per cylinder
- The adoption of a vapor reduction fuel return system and a vapor burning system, this engine achieves outstanding power output performance and good emissions control at the same time.
- The multi-point fuel injection and outstanding control function of the ECM help achieve excellent fuel economy.
- The labyrinth type exhaust and long-span mounting system help ensure very quiet running performance.
- 2.33 gear ratio for great durability and high performance
- The manual tiller spec features a multi-function tiller handle for excellent operability.\*

\* This is a standard feature for the tiller handle model. It is an option for the remote control model.

Development Background: The F70 is Yamaha Motor's first 70hp 4-stroke outboard. Its development target is for mounting on lightweight aluminum pleasure-use boats or RIB boats and open (deck-less) FRP boats. It is the lightest and most compact in size of all the 4-stroke models in its horsepower class. At the same it has outstanding acceleration performance that makes it the ideal choice for owners wishing to switch from a 2-stroke without losing boat performance. In addition to this performance, this model also features new-generation exterior design with a completely





## **One-point Service Advice**

# Using a micrometer stand

This edition continues the previous edition's knowledge search series aimed at reviewing the basic skills and technical fundamentals of items that we use often in our service work.

The subject this time is the micrometer stand.

#### What is the micrometer stand?

When doing measurements using a micrometer, most people hold the object they want to measure with their left hand and rotate the thimble on the micrometer with their right hand.



When doing so, the micrometer must also be held in one hand. This means that one hand must carry out two tasks at the same time. It is therefore difficult to make accurate measurements in a short time.

The micrometer stand in a device to hold the micrometer so that each hand only has to carry out one task at a time.

#### Factors that influence the measurement

Measurements can be carried out with ease by using the micrometer stand. However, this is not the only role of the micrometer stand.

Let's now think about the factors that influence the measurement.

Normally the following factors can influence the measurement.

- 1. Particles of debris or dirt on the measurement surface
- 2. Misalignment of the zero point
- 3. Discrepancy in the pressure exerted by the spindle on the object being measured
- 4. Expansion/contraction due to temperature
- 5. Eye position when reading the scale

Of these, factors number 1, 2 and 5 can be eliminated easily by the care of the operator. Number 3 can also be eliminated because the stand is equipped with a friction thimble.

#### Heat influences the micrometer reading

How about factor 4, expansion/contraction due to temperature?

The general coefficient of thermal expansion for iron is 0.000012. Therefore, if the temperature of a 10mm iron bar is increased by  $10\mu$ , the iron bar will expand by  $12\mu$ . Considering the fact that the smallest increment



on a micrometer is 1/100mm= $10\mu$  or 1/1000mm= $1\mu$ , you can see that temperature does indeed have a significant effect on measurements.

In fact, if you hold a micrometer with your hand for 15 minutes, a 50mm type will expand by  $4\mu$ , a 100mm type will expand by  $6\mu$ , and a 200mm type will expand by  $9\mu$ .

#### Things to be careful of when measuring

Considering this effect, using a micrometer stand eliminates the influence of your body heat (through the hand) from influencing the measurement the micrometer will give. However, even if you use a micrometer stand and thus avoid holding the micrometer in your hand, a similar type of error may occur if you hold the object to be measured in your hands for a prolonged period of time.



When making measurements, you should make efforts to minimize the variables that can influence the measurement. There are many other variable factors involved as well, such as where, by whom and with what technique the measurement is made. One must first be able to understand and carry out the measurement procedures correctly.

#### **DreSugimotoChanteyEditorfalRoom** YAMAHA MOTOR CO., LTD., Marine Business Operations,

1400 Nippashi, Minami-ku, Hamamatsu, Shizuoka 432-8528, Japan

## Customer Management - An Essential Key to Marine Business Success

#### Customer management method

The importance of customer management may not be felt at times when the economy is favorable and new clients visit the store one after another. However, the business base becomes stronger if we can make first-time customers into loyal lifetime customers. This is another reason why each customer we get is so important. Then, how should we carry out our customer management?

#### I) Creating customer files

The following items are important for customer management of outboard users.

- Make a PDI (Pre Delivery Inspection) sheet
- Make a warranty registration
- Make customer cards (containing a variety of customer information)
- Make service cards (a record of repair or maintenance)

PDI must be carried out and a PDI sheet must be filled in, and if it is filed together with the warranty registration, customer card, and service card, sales and maintenance can be carried out effectively and precisely. It is even better if a database can be compiled on a computer using this information.

#### 2) Items on the customer card

What types of information should the customer card contain so that it becomes an effective tool to base sales activities on?

Apart from basic information such as name / date of birth / address / contact phone number / work contact details / name(s) of purchased product(s) / date of purchase, any other information

that may be useful for business activities such as a customer photo / hobbies / family makeup / birthdays of family members. Some marine dealers in Japan found that simply sending a little gift to the client's wife based on the customer card made for smoother business negotiations.

#### 3) Customer card maintenance

There are many dealers who relax once they have made the customer card. However, more important things should follow. Firstly, there is the updating maintenance. Although name and

date of birth may not change, information such as address, contact details, purchased products must be kept up to date.

It is even more important to effectively use the customer information that you have compiled. Our next issue will explain how the customer information can be utilized.



Part 2

		P YAMAI		DN .	
int het	YAMAH P23P24		LTG PON	-8-	
Arres	-	-		Summer Page	

AUTHORIZED	AMAHA AFTER SALES SERVICE
AM IS BEDICATED TO OLIGITUM	MARK-OUTDON'S GREATING OLDER PLAN PERFORMANCE PRATECTION IN CONTACTING REPOLLOWING PERSONAL INCOMPLETATION SALES SERVICE.
SHEWAR	coviects
	DALIR PRION
	SOWCE
	SWEINT:
ONE	
IAC.	

	SERVICE LOG	
Real Property lies		
(Distance) (Distance)	har_	late.
teta topacture	5mm	-
THE Insuff (17 year)	tour_	
Loke & Robry Projection		
Server() part	Dear	24
Lake & Saling respection	Service	NO
Minan(Spat)	har	100
I de Libéry Inspecter Parmetels Innes	6-44 -	-

Example of customer list items using the Excel software on a  $\mathsf{PC}$ 

ModelNo	Ser	rialNo	Le	ngth	Model Year	U	nit Q'ty	Customer Name	1	City	Street		ate	Phone
SD50J	0000	000	L	A										
SD50J	0000	000	L	A					-			_		
	28	Pher	1e	Mobile Phone	T	omer /pe		je Usag type		Dealer Name	Purcha Date		Strage Area	date
	20	Phor	ne				Usag その他					1/01		

Example of customer management data under preparation at Yamaha Motor. Service records based on engine usage time can be saved as a "Service Log"

### **News Round Up**

Activities from distributors around the world, and more

## Delivery of F90B outboards for school boats begins in the Amazon basin of Brazil





On April 5, 2010, a ceremony was held in the city of Belem in Para State to commemorate the start of a project by the Brazilian Department of Education and other agencies to distribute a total of 600 "school boats" in the region. Attending the ceremony were the state Governor, education department representatives and other guests. The project aims to provide transportation to and from school for children living in regions of the Amazon basin without suitable land transportation. For this project, Yamaha Motor do Brasil Ltda. (YMDB) will be supplying 600 units of the F90B 4-stroke outboard over the next two years along with four years worth of service support. Soon, the sight of children commuting to school in boats powered by the Yamaha F90B will become a common throughout the Amazon basin.

## The Dubai International Boat Show 2010



he Yamaha booth at the center of the show venue





The EXULT 35 SS on display at the Yamaha booth mounts win F350A outboards



Superjet White Version for color customizing introduced in the last A boat with a triple F350A mount was also seen edition of *Chantey* was displayed

From March 9 to 13, the 18<sup>th</sup> Dubai International Boat Show was held at Dubai International Marine Club. The five-day show, hosted more than 700 exhibitors from 40 countries — a 36% increase over last year's total. Multi-million dollar sales were recorded at this year's show and this is a clear indication that the leisure marine market in the Middle East is on the road to recovery. At the Yamaha booth mounted by the local distributor Al Yousuf, there were exhibits of four boats manufactured by Al Yousuf, outboard motors, WaveRunner PWCs and so on. Al Yousuf also attracted a lot of show attention by holding a lottery give-away of a Yamaha SJ700 personal watercraft. In the Middle East market, where multi-engine outboard rigs are increasingly popular, Yamaha had a prominent presence with its top-of-the-line F350A.

YAMAHA OUTBOARDS WEB SITE WAVERUNNER FAN SITE http://www.yamaha-motor.co.jp/global/consumer/outboards/index.html
 http://www.waverunner-fan.com/