

## Yanmar Europe Marine Sales Department MARKETING BULLETIN 107

Ref No.: YEU-MB107  
Date: February 6, 2013

To : All YEU Marine Distributors in Europe, CIS & Africa  
Subject : **Introduction of new Yanmar Sail drive SD60**

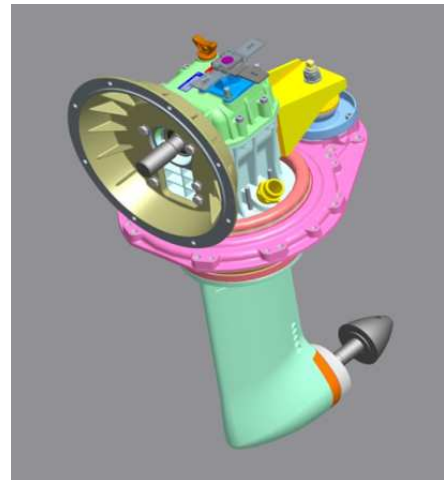
### 1. Introduction

Herewith Yanmar Europe wishes to inform its Marine Distributor Network regarding the introduction of a new Sail drive model SD60. This new model will supersede the current SD50 Sail drive series currently applied to Yanmar JH-CE engine series.

### 2. Technical specifications

The new SD60 Sail drive series are developed with the following advantages compared to the SD50 Sail drive series :

- A) Achieve higher quality
- B) Ensure higher durability
- C) Ensure safety
- D) Cover a wider range of application
- E) Improve serviceability



The following table shows the differences and similarities between the SD50 and SD60:

Feature	SD50 (SAE5) and SD50-4T (SAE4)	SD60 Series (SAE5 and SAE4)
1. Suitability	3JH5, 4JH5, 4JH4TE	3JH5, 4JH5, 4JH4TE
2. Clutch System	Cone Clutch	Wet Multidisc
3. Available Gear Ratio's	2,32:1	2,23:1 and 2,49:1
4. Length of Saildrive Leg	Standard	Standard + 75mm Ext Optional
5. Anodes	Standard	Standard (same as SD20/50)
6. Lubrication Oil	Quicksilver Oil	15W40 Oil (same as YM/JH engine)
7. Allowable Propellers	Fixed and Foldable	Fixed and Foldable
8. Oil Change	From Outside Boat	From Engine Room
9. Reversed installation	Modification by Yanmar Europe	Modification by Distributor
10. Safety	Double Diaphragm Seal with Alarm	Double Diaphragm Seal with Alarm
11. Propeller mounting	Designated Cone Nut SD50	Same Cone Nut as SD20 (standard)

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Complementary to the introduction of SD60 Sail Drives Yanmar Europe will offer the following accessories :

- Propeller Cone Nut (available as engine option in Go Easy, same as for SD20)
- Rope Cutter (to be introduced shortly)
- Sail drive bed stainless steel adaptor plate (to install SD60 on SD50 bed, thickness 10mm) (available as component under engine options in Go Easy as from 1 March)

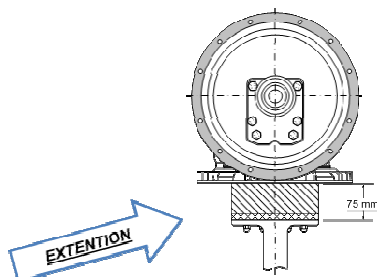
### 3. Sales Product Codes and Names

The new Sail drive will be available in 2 different lengths and 2 different Gear Ratio's to accommodate different types of hull construction and allow for a wider range of propeller selection.

The SD60 will be applied to the engine models by their sales name as follows:

Model name	3JH5	4JH5	4JH4TE	Explanation	Stock (S1=stock, S0=5 month del)
SD60-5-2, 23-S	☑	☑	☐	SAE5 / RR 2,23 / Standard length	S1 (repl SD50)
SD60-5-2, 49-S	☑	☑	☐	SAE5 / RR 2,49 / Standard length	S0
SD60-5-2, 23-L	☑	☑	☐	SAE5 / RR 2,23 / Extended length	S0
SD60-5-2, 49-L	☑	☑	☐	SAE5 / RR 2,49 / Extended length	S1
SD60-4-2, 23-S	☐	☐	☑	SAE4 / RR 2,23 / Standard length	S1 (repl SD50-4T)
SD60-4-2, 49-S	☐	☐	☑	SAE4 / RR 2,49 / Standard length	S0
SD60-4-2, 23-L	☐	☐	☑	SAE4 / RR 2,23 / Extended length	S0
SD60-4-2, 49-L	☐	☐	☑	SAE4 / RR 2,49 / Extended length	S1

There will be no reversed models available from factory. However, it is possible to create a reversed version by changing the leg. A modification instruction is available from Yanmar Europe.



Position of SD60 Leg extension part (L=75mm).

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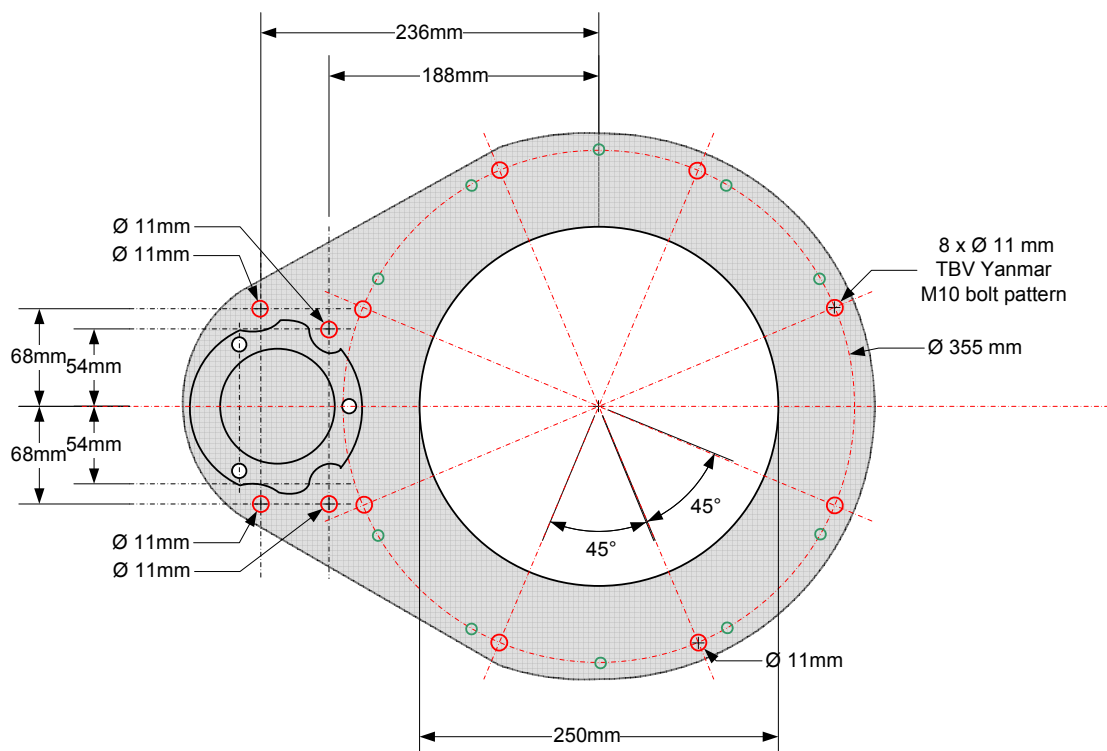
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### 4. Installation

The new SD60 is compatible with the previous SD50. Please find below the items that need to be considered during installation :

#### A) Engine bed

- The shape of the engine bed is almost similar to that off the SD50 Sail Drive, with a difference in the space required for the rear engine mount. During installation it is necessary to check whether or not the existing engine bed has enough material to support the SD60 Sail Drive, as the rear flexible mount must be fully supported by the engine bed. [See below installation drawing]  
The drive is fixed to the engine bed by 8 x M10 bolt + 4 x M10 bolt. (or studs with nuts).
- If there is not enough FRP material to give the SD60 Sail Drive enough support, one must either modify the engine bed or alternatively use a an adaptor plate to ensure enough support. This adaptor plate will be made available by Yanmar Europe as an option, also for replacement of SD50 Sail Drive to SD60 Sail Drive.



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### B) Engine flexible coupling

With the new SD60, we are able to unify the coupling between the engine and the saildrive for all models. Please see below table regarding the changes



Previous Saildrive model	Flexible coupling		New Saildrive model	Flexible coupling
3JH5-SD50	Torflex 250 coupler 196440-04310	→	3JH5-SD60	Spring-type damper disk. 177090-03500
4JH5-SD50	Torflex 250 coupler 196440-04310	→	4JH5-SD60	Spring-type damper disk. 177090-03500
4JH4-TE-SD50-4T	Torflex 250 coupler 196440-04300	→	4JH4-TE-SD60	Spring-type damper disk. 177090-03500

**Please consider type of coupling when applying SD60 Sail Drive to existing installations and stock engines ! All JH-CE Engines manufactured as from 1<sup>st</sup> February 2013 will be prepared for SD60 Sail Drive and equipped with Spring-type damper disc.**

In case you require separate couplings to modify stock engines either way then please contact your designated Area Manager by e-mail by 31<sup>st</sup> March 2013 accompanied by Engine serial number and Sail drive serial number.

### C) Drawings

Applicable drawings for combinations of JH-CE Engine models with SD60 Sail drive models will be placed on the [www.yanmarmarine.com](http://www.yanmarmarine.com) website.

### **5. Propeller matching**

The criteria for matching propellers on the SD60 are more flexible than for the SD50. Yanmar can allow propellers up to 21", but with a **mass moment of inertia** limitation of **0.22 Kgm<sup>2</sup>**. Yanmar does recommend to use propellers that have a rubber central hub, to reduce the initial shock-torque.

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### **6. Recommended usage of SD60 Sail Drive under sail**

For the new SD60 Sail Drive the same usage guidelines exist as for the SD50 Sail Drive. Please see as a reference below table:

	SD50	SD60
Freewheeling	Allowed	Allowed
Lock folding/feathering propeller in reverse	Allowed	Allowed
Lock fixed propeller in reverse	NOT allowed	Allowed, but not recommended
Lock folding/feathering propeller in forward	NOT allowed	NOT allowed
Lock fixed propeller in forward	NOT allowed	NOT allowed

### **7. Time of introduction**

Yanmar Marine International will start to supply the new SD60 Sail drive models that replace SD50 and SD50-4T as from February 2013 onwards. Accepted orders in the system for SD50 and SD50-4T Sail drives will automatically be adjusted to SD60 Sail drives with gear ratio 2,23:1 in standard length, and shipped accordingly.

SD60 Sail drive models with 2,49 ratio and extended length will be available as from March 2013 orderintake, April 2013 deliveries.

The new SD60 Sail drive models can be ordered via the Go Easy System at your following monthly order intake. The SD50 Sail drive models are no longer available at same time.

### **8. Pricing**

Yanmar Europe decides to apply similar pricing for SD60 Sail Drive models that replace SD50 and SD50-4T until 1<sup>st</sup> July 2013. Different prices apply for different lengths and high gear ratio (2,49:1) as advised via the Go Easy Ordering system.

### **9. Distribution and Questions**

For questions or remarks on the content of this Bulletin, please contact your designated Yanmar Area Manager at YEU Marine Sales Department.