

# REPAIR PRO



Fix it like a Pro

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## HOW TO USE THIS MANUAL

### MANUAL FORMAT

All of the procedures in this manual are organized in a sequential, step-by-step format. The information has been compiled to provide the mechanic with an easy to read, handy reference that contains comprehensive explanations of all disassembly, repair, assembly, and inspection operations.

In this revised format, the condition of a faulty component will precede an arrow symbol and the course of action required will follow the symbol, e.g.,

- Bearings  
Pitting/Damage→Replace.

To assist you to find your way about this manual, the Section Title and Major Heading is given at the head of every page.

An Index to contents is provided on the first page of each Section.

### MODEL INDICATION

Multiple models are shown in this manual. These indications are noted as follows.

| Model name                            | Indication |
|---------------------------------------|------------|
| Super Jet (SJ700)<br>Marine Jet 700SJ | SJ         |
| FX1                                   | FX1        |

### THE ILLUSTRATIONS

Some illustrations in this manual may differ from the model you have. This is because a procedure described may relate to several models, though only one may be illustrated. (The name of model described will be mentioned in the description).


### REFERENCES

These have been kept to a minimum; however, when you are referred to another section of the manual, you are told the page number to go to.

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**WARNINGS; CAUTIONS AND NOTES**

Attention is drawn to the various Warnings, Cautions and Notes which distinguish important information in this manual in the following ways.

 The Safety Alert Symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

 **WARNING**

**Failure to follow WARNING instructions could result in severe injury or death to the machine operator, a bystander, or a person inspecting or repairing the water vehicle.**

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 **CAUTION:**







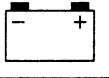




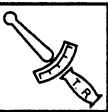











**A CAUTION indicates special precautions that must be taken to avoid damage to the water vehicle.**

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**NOTE:**

A NOTE provides key information to make procedures easier or clearer.

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|                                                                                                    |                                                                                                     |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| ①<br>GEN<br>INFO  | ②<br>SPEC          |
| ③<br>INSP<br>ADJ  | ④<br>FUEL          |
| ⑤<br>POWR         | ⑥<br>JET<br>PUMP   |
| ⑦<br>ELEC         | ⑧<br>HULL<br>HOOD  |
| ⑨<br>TRBL<br>SHTG ?                                                                                | ⑩                  |
| ⑪                | ⑫                 |
| ⑬               | ⑭                |
| ⑮               | ⑯                |
| ⑰               | ⑱                |
| ⑲               | ⑳                |
| ㉑               | ㉒                |
| ㉓               | ㉔                |

## SYMBOLS

Symbols ① to ⑨ are designed as thumb-tabs to indicate the content of a chapter:

- ① General Information
- ② Specifications
- ③ Periodic Inspection and Adjustment
- ④ Fuel System
- ⑤ Power Unit
- ⑥ Jet Pump Unit
- ⑦ Electrical System
- ⑧ Hull and Hood
- ⑨ Trouble-shooting

Symbols ⑩ to ⑮ indicate specific data:

- ⑩ Special tool
- ⑪ Lubricant
- ⑫ Engine speed
- ⑬ Tightening torque
- ⑭ Specified value, Service limit
- ⑮ Resistance ( $\Omega$ ), Voltage (V), Electric current (A)

Symbol ⑯ to ⑳ in an exploded diagram indicate grade of lubricant and location of lubrication point:

- ⑯ Apply Yamaha two-cycle outboard oil (Yamalube two-cycle outboard oil, Yamalube 1)
- ⑰ Apply water resistant grease (Yamaha grease A, Yamaha marine grease)
- ⑱ Apply water resistant grease (Yamaha grease D, Yamaha marine grease)










Symbols ㉑ to ㉔ in an exploded diagram indicate grade of sealing or locking agent, and location of application point:

- ㉑ Apply Gasket maker®
- ㉒ Apply LOCTITE® No. 271 (Red LOCTITE)
- ㉓ Apply LOCTITE® No. 242 (Blue LOCTITE)
- ㉔ Apply LOCTITE® No. 572
- ㉕ Apply Silicone sealant
- ㉖ Apply Yamabond #4 (Yamaha bond No. 4)

## NOTE:

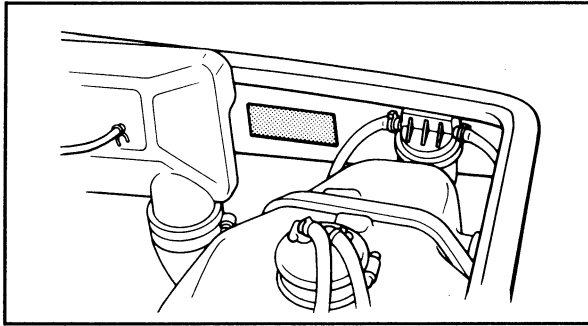
In this manual, the above symbols may not be used in every case.

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## CHAPTER 1. GENERAL INFORMATION

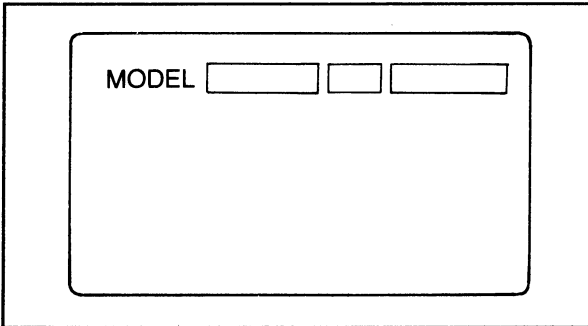
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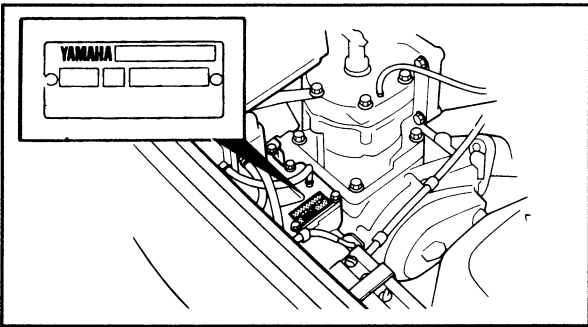
**IDENTIFICATION NUMBERS**

**PRIMARY I.D. NUMBER**

The primary I.D. number is stamped on a plate attached to the inside of the engine compartment.



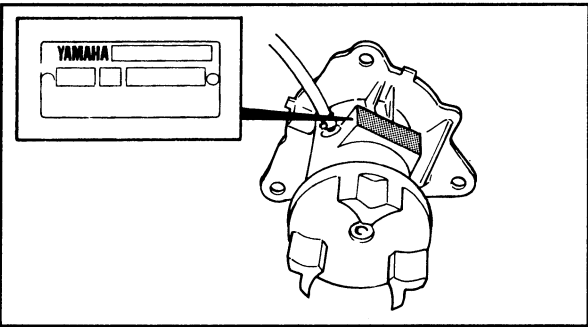
**Starting Primary I.D. Number:**  
 GH7: 800101~ (Except for F)  
 600101~ (For F)  
 FX1: 900101~ (Except for F)  
 910101~ (For F)



**ENGINE SERIAL NUMBER**

The engine serial number is stamped on a plate attached to the intake manifold.

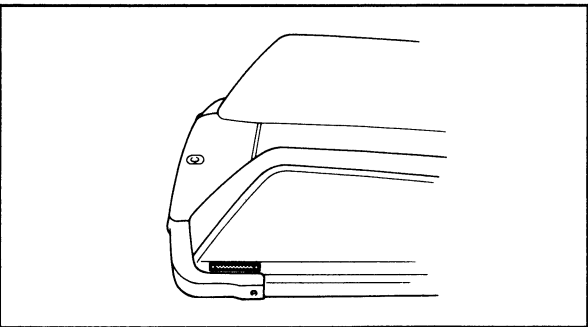
**Starting serial number:**  
 62N: 000101~  
 62L: 000101~



**PUMP SERIAL NUMBER**

The jet pump unit serial number is stamped on a plate attached on the intermediate housing.

**Starting serial number:**  
 62N: 500101~  
 62L: 500101~



**HULL IDENTIFICATION NUMBER (H.I.N.)**

The H.I.N. is stamped on the rear end of the footrest floor.



## **SAFETY WHILE WORKING**

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### **SAFETY WHILE WORKING**

The procedures given in this manual are those recommended by Yamaha to be followed by Yamaha dealers and their mechanics.

#### **FIRE PREVENTION**

Petrol (petroleum spirit, gasoline) is highly flammable.

Petroleum vapour is explosive if ignited. Do not smoke while handling gasoline, and keep it away from heat, sparks, and open flames.

#### **VENTILATION**

Petroleum vapour is heavier than air and if inhaled in large quantities will not support life. Engine exhaust gases are harmful to breathe. When test-running an engine indoors, maintain good ventilation.

#### **SELF-PROTECTION**

Protect your eyes with suitable safety spectacles or safety goggles when using compressed air, when grinding or when doing any operation which may cause particles to fly off. Protect hands and feet by wearing safety gloves or protective shoes if appropriate to the work you are doing.





## **SAFETY WHILE WORKING**

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### **OILS, GREASES AND SEALING FLUIDS**

Use only genuine Yamaha oils, greases and sealing fluids or those recommended by Yamaha.

Under normal conditions of use, there should be no hazards from the use of the lubricants mentioned in this manual, but safety is all-important, and by adopting good safety practises. any risk is minimized. A summary of the most important precautions is as follows:

1. While working, maintain good standards of personal and industrial hygiene.
2. Clothing which has become contaminated with lubricants should be changed as soon as practicable, and laundered before further use.
3. Avoid skin contact with lubricants; do not, for example, place a soiled wiping-rag in one's pocket.
4. Hands, and any other part of the body which have been in contact with lubricants or lubricant-contaminated clothing, should be thoroughly washed with hot water and soap as soon as practicable.
5. To protect the skin, the application of a suitable barrier cream to the hands before working is recommended.
6. A supply of clean lint-free cloths should be available for wiping purposes.



## **SAFETY WHILE WORKING**

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### **GOOD WORKING PRACTICES**

1. The right tools  
Use the special tools that are advised to protect parts from damage. Use the right tool in the right manner- don't improvise.
2. Tightening torque  
Follow the torque tightening instructions. When tightening bolts, nuts and screws, tighten the larger sizes first, and tighten inner-positioned fixings before outer-positioned ones.
3. Non-reusable items  
Always use new gaskets, packing, o-rings, split-pins and circlips etc on reassembly.

### **DISASSEMBLY AND ASSEMBLY**

1. Clean parts with compressed-air on disassembling them.
2. Oil the contact surfaces of moving parts on assembly.
3. After assembly, check that moving parts operate normally.
4. Install bearings with the manufacturer's markings on the side exposed to view, and liberally oil the bearings.
5. When installing oil seals, apply a light coating of water-resistant grease to the outside diameter.