

# MARINE DIESEL ENGINE MODEL:2YM15/3YM20/3YM30

# **OPERATION MANUAL**

The 2YM15/3YM20/3YM30 is an EPA Certified Engine. It meets the low emission standards set by the EPA.

ΕN

#### **California Proposition 65 Warning**

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

#### California Proposition 65 Warning

Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Wash your hands after handling.

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# INTRODUCTION

Thank you for purchasing a YANMAR Marine Diesel Engine.

This Operation Manual describes the operation, maintenance and inspection of the 2YM15/3YM20/3YM30Yanmar Marine Diesel Engines.

Read this Operation Manual carefully before operating the engine to ensure that it is used correctly and that it stays in the best possible condition.

Keep this Operation Manual in a convenient place for easy access.

If this Operation Manual is lost or damaged, order a new one from your dealer or distributor.

Make sure this manual is transferred to subsequent owners. It should be considered as a permanent part of the engine and remain so.

Constant efforts are made to improve the quality and performance of Yanmar products, so some details included in this Operation Manual may differ slightly from your engine. If you have any questions about this, please contact your Yanmar dealer or distributor.

Operation Manual (Marine Engine)	Model	2YM15/3YM20/3YM30
	Code. No.	49961-206364

The essentials of the sail drive are described in this manual. For further details on its use, refer to the sail drive manual.

ΕN

# 1. FOR YOUR SAFETY

# 1. FOR YOUR SAFETY

# 1.1 Warning Symbols

Most operation, maintenance and inspection problems arise due to users' failure to comply with the rules and precautions for safe operation described in this operation manual. Often, users do not understand or recognize the signs of approaching problems. Improper handling can cause burns and other injuries and can result in death.

Be sure to read this operation manual carefully before operating the engine and observe all of the instructions and precautions described in this manual. Follow the warning signs below in this manual. Pay special attention to parts containing these words and signs.



DANGER indicates an imminently hazardous situation, which if not avoided, WILL result in death or serious injury.



WARNING indicates a potentially hazardous situation, which if not avoided, COULD result in death or serious injury.



CAUTION indicates a potentially hazardous situation, which if not avoided, may result in minor or moderate injury. This sign is also used to alert against unsafe practices.

The descriptions captioned by **NOTICE** are particularly important cautions for handling. If you ignore them, the performance of your machine may deteriorate leading to problems.

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# 1. FOR YOUR SAFETY

# 1.2 Safety Precautions

(Observe these instructions for your own safety!)

Precautions for Operation

# **A** DANGER

Filler Cap of Coolant Tank



Never open the cap of the coolant tank while the engine is still hot. Steam and hot water may spurt out and burn you seriously. Wait until the temperature of the coolant tank has dropped, wrap a cloth around the filler cap, loosen the cap very carefully and slowly to remove the system pressure before removing the cap. After inspection, refasten the cap firmly.

## **▲** DANGER

#### Battery



Never smoke or permit sparks near the battery, because it may emit explosive hydrogen gas. Place the battery in a well-ventilated place.

## **A** DANGER

#### Fuel



Use only diesel fuel. Never use other fuels, including gasoline, kerosene, etc., because they could cause a fire. The wrong fuel could also cause the fuel injection pump and injector to fail due to lack of proper lubrication. Be sure to check that you have selected the correct diesel fuel before filling the fuel tank.

Do not use starting fluids or sprays. Their use may cause explosion, serious injury and engine damage.

# **▲** WARNING

#### Fire Prevention



Be sure to stop the engine and confirm that there are no open flames in the vicinity before fueling. If you do spill fuel, wipe such spillage carefully and dispose of the wiping materials properly. Wash your hands thoroughly with soap and water.

Never place oil or other flammable material in the engine room. Install a fire extinguisher near the engine room, and familiarize yourself with its use.

#### **▲** WARNING

#### **Exhaust Gas**



Exhaust gas contains poisonous carbon monoxide and should not be inhaled.

Be sure to install ventilation ports or ventilators in the engine room and ensure good ventilation during engine operation.

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