

## **OPERATION MANUAL**

**TNV** 



### **OPERATION MANUAL**

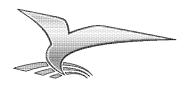
### INDUSTRIAL ENGINES



2TNV70 3TNV76 3TNV82A 3TNV84 3TNV84 3TNV84 4TNV84 4TNV84 4TNV84 4TNV94L 4TNV98 4TNV98T 4TNV106

## Thank you for purchasing YANMAR product.

Be sure to read this Operation Manual for you to use this product safety and correctly. Even after reading it, carefully keep it, making clear to all personnel concerned where it's kept so that the operator, mechanic or supervisor will have an access to it whenever he wants to read or refer to it.



# TNV series OPERATION MANUAL

2TNV70

3TNV70 • 3TNV76

**3TNV82A** 

3TNV84 • 3TNV84T • 3TNV88

4TNV84 • 4TNV84T • 4TNV88

4TNV94L

4TNV98 • 4TNV98T

4TNV106 • 4TNV106T

P/N: 0ATNV-G00100



INDUSTRIAL ENGINES

### INTRODUCTION

Welcome to the world of Yanmar Engines! Yanmar has been the leader in industrial diesel engines for over 90 years. We developed the world's first practical small-sized diesel engine in 1933. Our engineers are continuously developing new technology to keep Yanmar on the leading-edge of the industry. The TNV engine is only one example of the new technology we have developed. We are committed to maintaining our environment, and are proud of our history of innovation, quality and respect for operator safety.

To help you enjoy your Yanmar TNV engine for many years to come, please follow these recommendations:

- Read and understand this Operation Manual before you operate the machine to ensure that you follow safe operating practices and maintenance procedures.
- 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 authorized Yanmar industrial engine dealer or distributor.
- Make sure this manual is transferred to subsequent owners. This manual should be considered a permanent part of the engine and remain with it.

- 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 these differences, please contact your authorized Yanmar industrial engine dealer or distributor.
- The specifications and components (instrument panel, fuel tank, etc.) described in this manual may differ from ones installed on your machine. Please refer to the manual provided by the manufacturer of these components.

#### INTRODUCTION

### RECORD OF OWNERSHIP

Take a few moments to record the information you need when you contact Yanmar for service, parts or literature.

**Engine Model:** 

**Engine Serial No.:** 

**Date Purchased:** 

Dealer:

**Dealer Phone:** 

### SYMBOL EXPLANATION

The following symbols are used throughout this manual to identify specific engine model information



This symbol indicates information pertaining to the following indirect injection engines:

- 2TNV70
- 3TNV70
- 3TNV76



This symbol indicates information pertaining to the following direct injection engines:

- 3TNV82A
- 3TNV84
- 3TNV84T
- 3TNV88
- 4TNV84
- 4TNV84T
- 4TNV88
- 4TNV94L
- 4TNV98
- 4TNV98T
- 4TNV106
- 4TNV106T

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### **SAFETY**

### **SAFETY STATEMENTS**

Yanmar is concerned for your safety and your machine's condition. Safety statements are one of the primary ways to call your attention to the potential hazards associated with Yanmar TNV engine operation. Follow the precautions listed throughout the manual before operation, during operation and during periodic maintenance procedures for your safety, the safety of others and to protect the performance of your engine. Keep the labels from becoming dirty or torn and replace them if they are lost or damaged. Also, if you need to replace a part that has a label attached to it, make sure you order the new part and label at the same time.



This safety alert symbol appears with most safety statements. It means attention, become alert, your safety is involved! Please read and abide by the message that follows the safety alert symbol.

### **A** DANGER

Danger (the word "DANGER" is in white letters with a red rectangle behind it) - indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. Danger is limited to the most extreme situations.

0000001en

### **A** WARNING

Warning (the word "WARNING" is in black letters with an orange rectangle behind it) – indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

0000001en

### **A** CAUTION

Caution (the word "CAUTION" is in black letters with a yellow rectangle behind it) – indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

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#### **CAUTION**

Caution without the safety alert symbol indicates a potentially hazardous situation that can cause damage to the machine, personal property and / or the environment or cause the machine to operate improperly.

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