

# Engine Manual

## 3TNV Series

3TNV82A・3TNV82A-B・3TNV84  
3TNV84T・3TNV84T-B・3TNV88  
3TNV88-B・3TNV88-U

## 4TNV Series

4TNV84・4TNV84T・4TNV84T-Z  
4TNV88・4TNV88-B・4TNV88-U  
4TNV94L・4TNV98・4TNV98-E  
4TNV98-Z・4TNV98T・4TNV98T-Z  
4TNV106・4TNV106T

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## ***Section 1***

# **INTRODUCTION**

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This *Service Manual* describes the service procedures for the TNV series direct injection engines. These engines are certified by the U.S. EPA, California ARB and/or the 97/68/EC Directive for industrial use.

Please use this manual for accurate, quick and safe servicing of the engine. Since the directions in this manual are for a typical engine, some specifications and components may be different from your engine. Refer to the documentation supplied by the optional equipment manufacturer for specific service instructions.

Hitachi Construction Machinery products are continuously undergoing improvement. This *Service Manual* might not address possible field modifications to the equipment. Contact an authorized Yanmar industrial engine dealer or distributor for answers to any questions relating to field modifications.

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