

# Engine Manual Workshop Manual

## 3TNV Series

3TNV88C • 3TNV86CT • 3TNV86CHT

## 4TNV Series

4TNV88C • 4TNV86CT • 4TNV86CHT  
4TNV98C • 4TNV98CT

 Hitachi Construction Machinery Co., Ltd.

URL:<http://www.hitachi-c-m.com>

Service Manual consists of the following sections.

Technical Manual

Technical Manual (Operational Principle)

Technical Manual (Troubleshooting)

Workshop Manual

Engine Manual

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.

Foreword:

This Service Manual has been developed for the exclusive use of service and repair professionals such as HITACHI authorized distributors and HITACHI authorized dealers. It is written with these professionals in mind and may not contain the necessary detail or safety statements that may be required for a non-professional to perform the service or repair properly and/or safely. Please contact an authorized HITACHI repair or service professional before working on your HITACHI product.

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SERVICE MANUAL

3TNV88C, 3TNV86CT, 3TNV86CHT, 4TNV88C,  
4TNV86CT, 4TNV86CHT, 4TNV98C, 4TNV98CT

The specification and contents that are not equipped for the machine may be described in this book.

SERVICE MANUAL	MODEL	3TNV88C, 3TNV86CT, 3TNV86CHT, 4TNV88C, 4TNV86CT, 4TNV86CHT, 4TNV98C, 4TNV98CT
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## ***Section 1***

# **INTRODUCTION**

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This Service Manual describes the service procedures for the TNV series engines have common rail injection system. 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.

For the replacement of some parts and troubleshooting for the TNV series engines, the HITACHI Diagnostics Tool called SMARTASSIST-Direct is required. In addition, please read both Troubleshooting Manual and SMARTASSIST-Direct Operation Manual.

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

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