Reliable Solutions

## **Engine Manual Workshop Manual**

## **3TNV Series**

3TNV88C · 3TNV86CT · 3TNV86CHT

## 3TN Series

3TN88C · 3TN86CT · 3TN86CHT

## **4TNV Series**

4TNV88C · 4TNV86CT · 4TNV86CHT 4TNV98C · 4TNV98C-C · 4TNV98CT

4TNV98CT-C

## **4TN Series**

4TN88C · 4TN86CT · 4TN86CHT 4TN86DHT · 4TN98C · 4TN98CT

Service Manual consists of the following sections. **Technical Manual** Technical Manual (Operational Principle) Technical Manual (Troubleshooting) Workshop Manual **Engine Manual** 

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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, 4TNV98C-C, 4TNV98CT, 4TNV98CT-C, 3TN88C, 3TN86CH, 3TN86CHT, 4TN86CHT, 4TN98C, 4TN98CT |
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#### SERVICE MANUAL

3TNV88C, 3TNV86CT, 3TNV86CHT, 4TNV88C, 4TNV86CT, 4TNV86CHT, 4TNV98C, 4TNV98C-C, 4TNV98CT, 4TNV98CT-C, 3TN88C, 3TN86CH, 3TN86CHT, 4TN88C, 4TN86CH, 4TN86CHT, 4TN86CHT, 4TN98C, 4TN98CT

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#### Section 1

#### INTRODUCTION

This Service Manual describes the service procedures for the TNV, TN series engines have common rail injection system. These engines are certified by the U.S. EPA, California ARB, European EC Directive 97/68/EC, and/or Chinese national standard GB4 for industrial use.

Although BOSCH ECU (EDC17) is used for TNV and TN series engines, BOSCH ECU (MD1) is used for some TN series engines. In order to distinguish, the adopted engine of BOSCH ECU (MD1) is named TN OO - numbers (1 to 6). Where identification is required, the ECU model is indicated in parentheses after the engine model.

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

For the replacement of some parts and troubleshooting for the TNV, TN series engines, SMARTASSIST-Direct (SA-D) is required. In addition, please read both Troubleshooting Manual and SMARTASSIST-Direct (SA-D)Operation Manual.

HITACHI CONSTRUCTION MACHINERY products are continuously undergoing improvement. This Service Manual might not address possible field modifications to the equipment. Contact an HITACHI CONSTRUCTION MACHINERY Authorized dealer for answers to any questions relating to field modifications.

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