

Service Manual

S6S Diesel Engine

For use with:
DP40, DPL40, DP45,
DP50, DP60 and DP70

INTRODUCTION

This publication covers the Caterpillar S6S diesel engine. The information, specifications, and illustrations in this publication are on the basis of information that was current at the time this issue was written.

The fuel injection pump and governor are described in the separate volumes of this publication.

The sections and their contents will be found in TABLE OF CONTENTS and the contents of each section in the first page of the section.

1. How To Use This Manual

- (1) The parts read in the texts or shown in the illustrations are numbered in the disassembly sequence prescribed for each system or assembly.
- (2) What to be inspected for during disassembly are indicated in  in the disassembled view.
- (3) The maintenance standards to be referred to for inspection and repairs are indicated in easy-to-refer passages of the texts and also in Section 2 in a tabulated form.
- (4) Some marks are used in this manual to emphasize important and critical instructions as shown below:

 Procedures, conditions, etc. which it is essential to highlight.

 Procedures, practices, etc. which will result in damage to or destruction of engine if not strictly observed.

 Procedures, practices, etc. which will result in personal injury or loss of life if not correctly followed.

- (5) Tightening torque in “wet” condition is indicated as [wet]. Unless indicated as such, the torque is to be considered in “dry” condition.

2. Glossary

NOMINAL SIZE is the named size which has no specified limits of accuracy.

ASSEMBLY STANDARD is the dimension of a part to be attained at the time of assembly or the standard performance. Its value is rounded to the nearest whole number needed for inspection and is different from the design value.

STANDARD CLEARANCE is the clearance to be obtained between mating parts at the time of reassembly.

REPAIR LIMIT is the maximum or minimum dimension specified for a part. A part which has reached this limit must be repaired.

SERVICE LIMIT is the maximum or minimum dimension specified for a part. A part which has reached this limit must be replaced.

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