

# INTRODUCTION

This service manual has instructions and procedures for the Mitsubishi SL-series diesel engines.

The information, specifications and illustrations in this manual are on the basis of the information that was current at the time this issue was written.

Correct servicing, test and repair procedures will give the engine a long service life. Before starting a test, repair or rebuild job, the serviceman must read the respective sections of this manual to know all the component he will work on.

Continuing improvement of product design may have caused changes to your engine which are not included in this manual.

Whenever a question arises regarding your engine, or this manual, consult your Mitsubishi dealer for the latest available information.

Service Manual  
Mitsubishi SL-Series diesel engines  
Version 08/2004  
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# HOW TO USE THIS MANUAL

## Exploded views

In the exploded views, the component parts are separated but so arranged to show their relationship to the whole. Index numbering is used to identify the parts and to indicate a sequence in which the parts are to be removed for disassembly, or they are to be installed for assembly.

## Symbols

The following symbols are used in this manual to emphasize important and critical instructions:

<b>NOTE</b>	Indicates a condition that is essential to highlight.
<b>! CAUTION</b>	Indicates a condition that can cause engine damage
<b>! WARNING</b>	Indicates a condition that can cause personal injury or death.

## Definition of locational terms

The fan end is "front" and the flywheel end is "rear". The words "left" and "right" are as these directions would appear as seen from the flywheel side. The cylinder sequencing begins on the front side (timing gearcase side) of the engine and works its way to the flywheel side.

## Dimensional or specification terms

Nominal size	Is the named size which has no specified limits of accuracy.
Standard	Is the dimension of a part to be attained at the time of assembly, or the standard performance.
Limit	Is the maximum or minimum permissible limit beyond which a part must be repaired or replaced.

## Tightening torques

Tighten bolts, nuts, etc. in a wet condition (apply oil to threads) when specified as [WET]. Tighten them in a dry condition unless so specified. Use the general tightening torques unless otherwise specified.

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# **GENERAL INFORMATION**

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## 1.1 Model identification location

- The model identification is embossed on the right side of the cylinder block, near the fuel injection pump mount.
- The model identifications and displacements of the engines in current production are as listed below:

	<b>Displacement</b>
S3L	1.125 liters (68.7 cu in.)
S3L2	1.318 liters (80.4 cu in.)
S4L	1.500 liters (91.5 cu in.)
S4L2	1.758 liters (107.3 cu in.)

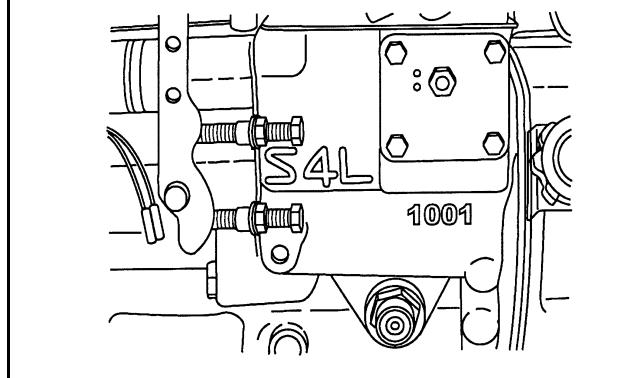


Figure 1 Model identification location

- A scheme of coding used for identifying the engines in current production is as follows:

S 4 L (2) – 61 A

S - Identification of "Sagamihara Machinery Works"

4 - Number-of-cylinders code ["4" stands for four cylinders]

L - Series code [Bore: 78 mm (3.07 in.)]

(2) - Stroke code

- (No code: 78.5 mm (3.09 in.))
- 2: 92 mm (3.62 in.)

61 - Export code

A - Specification code