

Isuzu Diesel Engine 4bg1 Instruction Manual

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ISUZU DIESEL ENGINE 4BG1

INSTRUCTION MANUAL

ISUZU MOTORS LIMITED

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FOREWORD

The ISUZU industrial diesel engines are a product of ISUZU's long years of experience, advanced technology. ISUZU takes great pride in the superior durability and operating economy of these engines.

In order to get the fullest use and benefit from your industrial engine, it is important that you operate and maintain it correctly. This Manual is designed to help you do this.

Please read this Manual carefully and follow its operating and maintenance recommendations. This will ensure many years of trouble-free and economical engine operation.

Should your engine require servicing, please contact your nearest ISUZU engine outlet. He knows your engine best and is ready to meet your satisfaction.

All information, illustrations, and specifications contained in this Manual are based on the latest product information available at the time of publication.

ISUZU reserves the right to make changes in this Manual at any time without prior notice.

1. CARE IN THE ENGINE OPERATION
2. ENGINE STOPPING
3. OPERATION AND CARE FOR NEW ENGINES
4. ENGINE CARE FOR OVER-COOLING

WARNING AND CAUTION

SAFETY WARNINGS

WARNING: These mean there is something that could hurt you or other people.

In the warning area, we tell you what the hazard is. Then we tell you what to do to help avoid or reduce the hazard. Please read these warnings. If you don't, you or others could be hurt.

ENGINE OR EQUIPMENT DAMAGE WARNINGS

CAUTION: These mean there is something that could damage your engine or equipment.

In the caution area, we tell you about something that can damage your engine or equipment. Many times, this damage would not be covered by your warranty, and it could be costly. But the caution will tell you what to do to help avoid the damage.

1. ENGINE EXTERNAL VIEWS

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1. ENGINE EXTERNAL VIEWS

EXTERNAL VIEW A-4BG1T (LH)

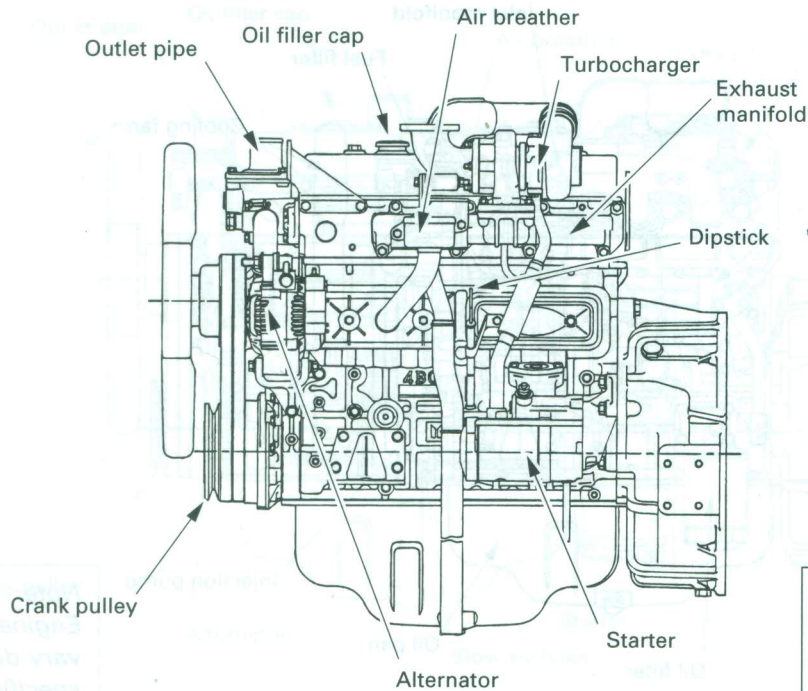
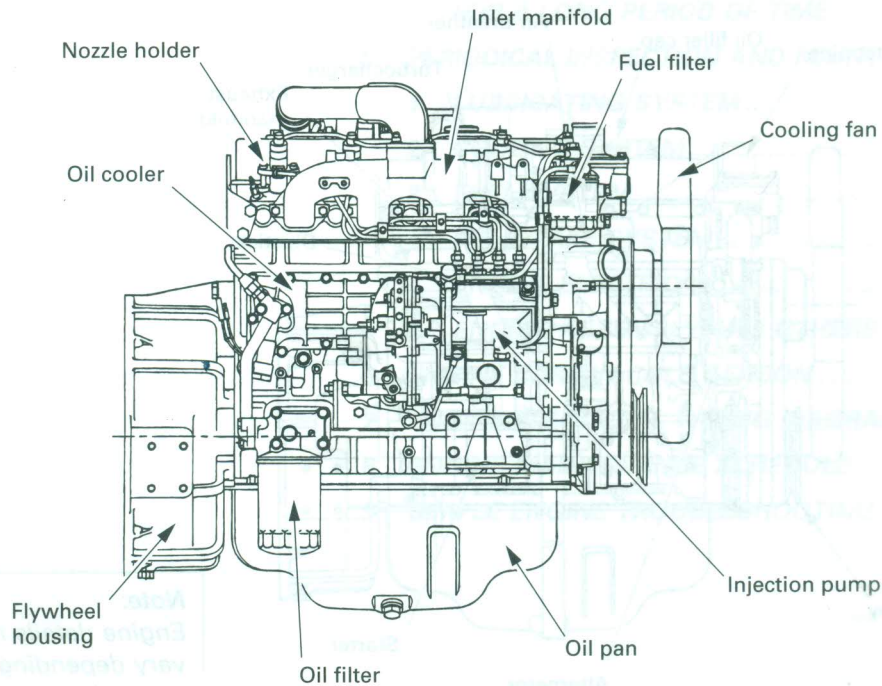


Fig. 1

*Note:
Engine details may
vary depending on the
specifications.*

EXTERNAL VIEW A-4BG1T (RH)

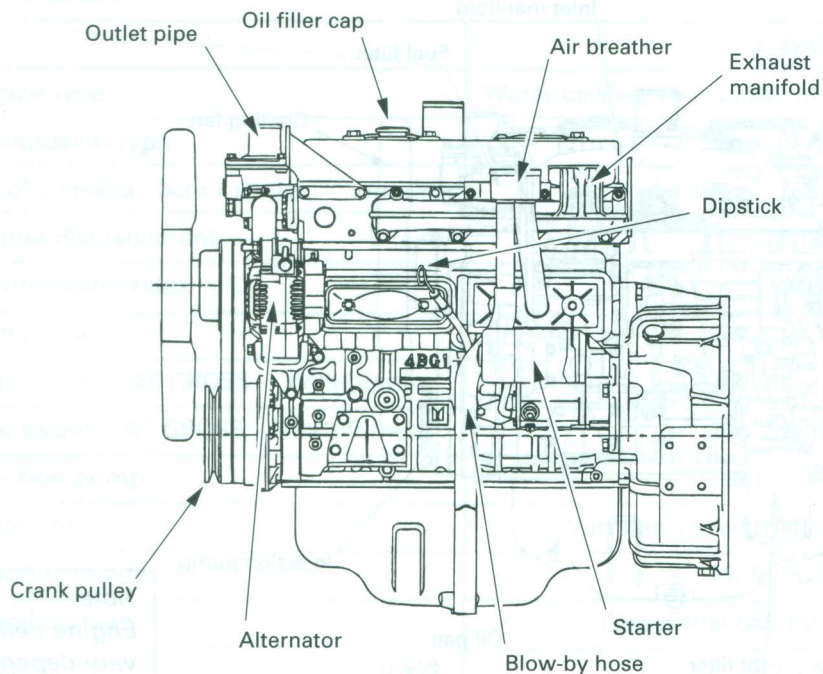


Note:
Engine details may vary depending on the specifications.

Fig. 2

2. GENERAL INFORMATION

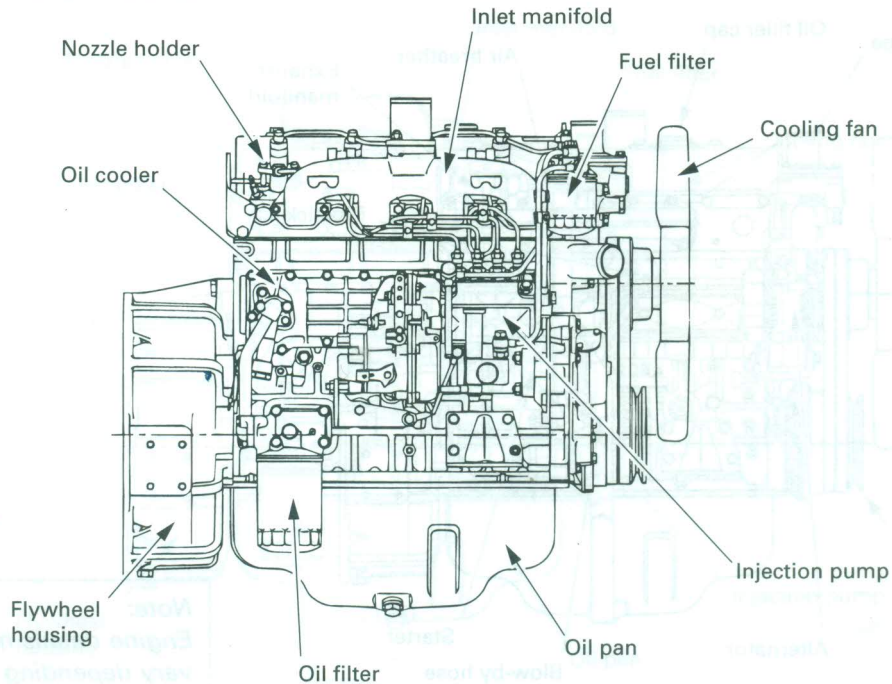
1. EXTERNAL VIEW A-4BG1 (LH)



*Note:
Engine details may
vary depending on the
specifications.*

Fig. 3

EXTERNAL VIEW A-4BG1 (RH)



Note:
Engine details may vary depending on the specifications.

Fig. 4

2. GENERAL INFORMATION

1. STANDARD ENGINE DATA AND SPECIFICATIONS

(1) Model A-4BG1T

Exp. STD Spec.

	A-4BG1T
Engine type	Water cooled, four cycle, in line overhead valve type
Combustion type	Direct injection
No. of cylinders - bore × stroke mm(in)	4 - 105 × 125 (4.13 × 4.92)
Engine displacement L (cid)	4.329 (264.2)
Compression ratio	17.0 to 1
Firing order	1 - 3 - 4 - 2
* Rated power; SAE GROSS kW(hp)/min ⁻¹	83 (111) / 2400
* Max. torque; SAE GROSS Nm(lbft)/min ⁻¹	385 (284) / 1600
Injection pump	Bosch A type
Governor	Variable speed, Mechanical type (RSV)
Injection nozzle	Multi-hole type
Specified fuel	Diesel fuel (ASTM D975 No. 2-D)
* Starter V-kW	12 - 3.0
* Alternator V-A	12 - 60