YANMAR

A0A1029-0104

SERVICE MANUAL

MARINE DIESEL ENGINE

4JH2E, 4JH2-TE,
4JH2-HTE, 4JH2-DTE

2001.4

YANMAR

SERVICE MANUAL

MARINE DIESEL ENGINE

MODELS

4JH2E
4JH2-TE
4JH2-HTE
4JH2-DTE

Publication No.	A0A1029-0104

History of Revision

Manual Name	Service Manual for Marine Diesel Engine
Engine Model :	4JH2E/4JH2-TE/-HTE/-DTE/-UTE

Number of revision	Date of revision	Reason for correction	Outline of correction	correction item No.(page)	Corrected by
1st	Apr. 2001	● Tightening torque bolts & nuts ● Crankshaft V-pulley bolt tightening torque.	● Injection timing changed. ● Added tightening torque of bolts and nuts for general use. ● Added the tightening torque of nut for the remote control cable connection of clutch shifting lever. (for KBW20/21) ● Added the standard V-pulley (material : casting iron) bolt tightening torque.	1−4, 10−31 10−32 8−3	Quality Assurance Dept.

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FOREWORD

This service manual has been compiled for engineers engaged in sales, service, inspection and maintenance. Accordingly, descriptions of the construction and functions of the engine are emphasized in this manual while items which should already be common knowledge are omitted.
One characteristic of a marine diesel engine is that its performance in a vessel is governed by its applicability to the vessel's hull construction and its steering system.
Engine installation, fitting out and propeller selection have a substantial effect on the performance of the engine and the vessel. Moreover, when the engine runs unevenly or when trouble occurs, it is essential to check a wide range of operating conditions — such as installation on the hull and suitability of the ship's piping and propeller — and not just the engine itself. To get maximum performance from this engine, you should completely understand its functions, construction and capabilities, as well as proper use and servicing.
Use this manual as a handy reference in daily inspection and maintenance, and as a text for engineering guidance.

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MODELS

4JH2E
4JH2-TE
4JH2-HTE
4JH2-DTE

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Ref. 4JH/4JH2E PARTS DEFERING

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CHAPTER 1

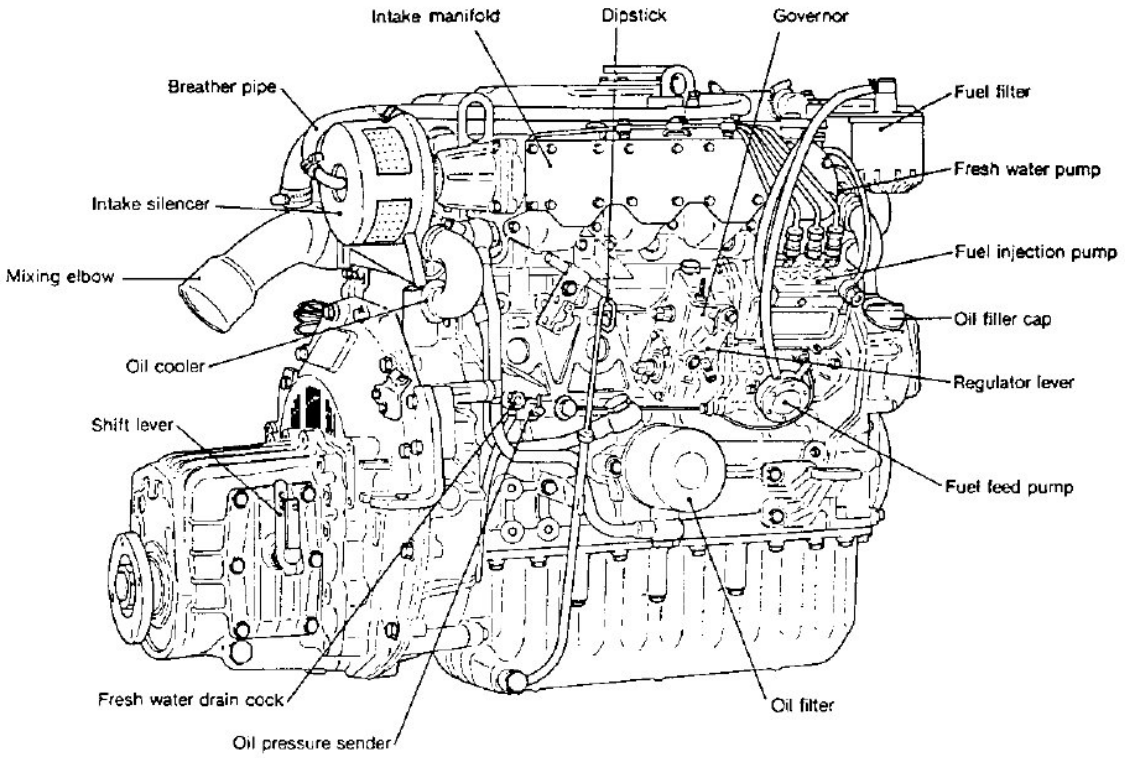
GENERAL

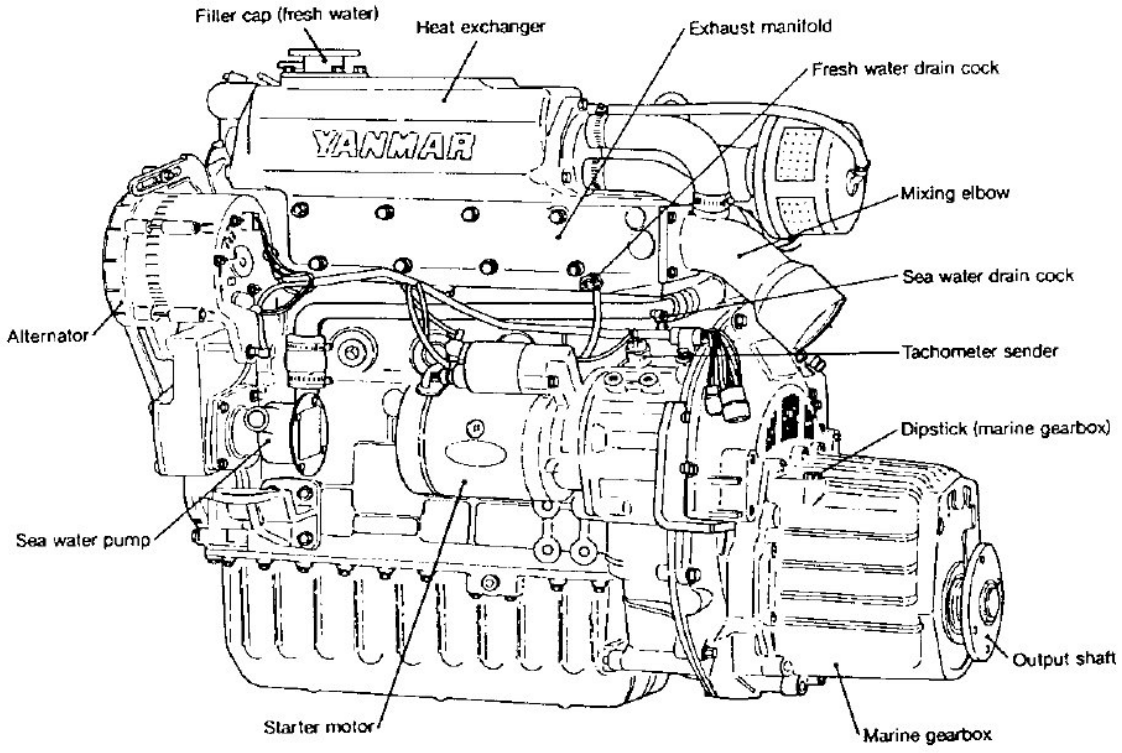
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1. Exterior Views

1-1 4JH2E

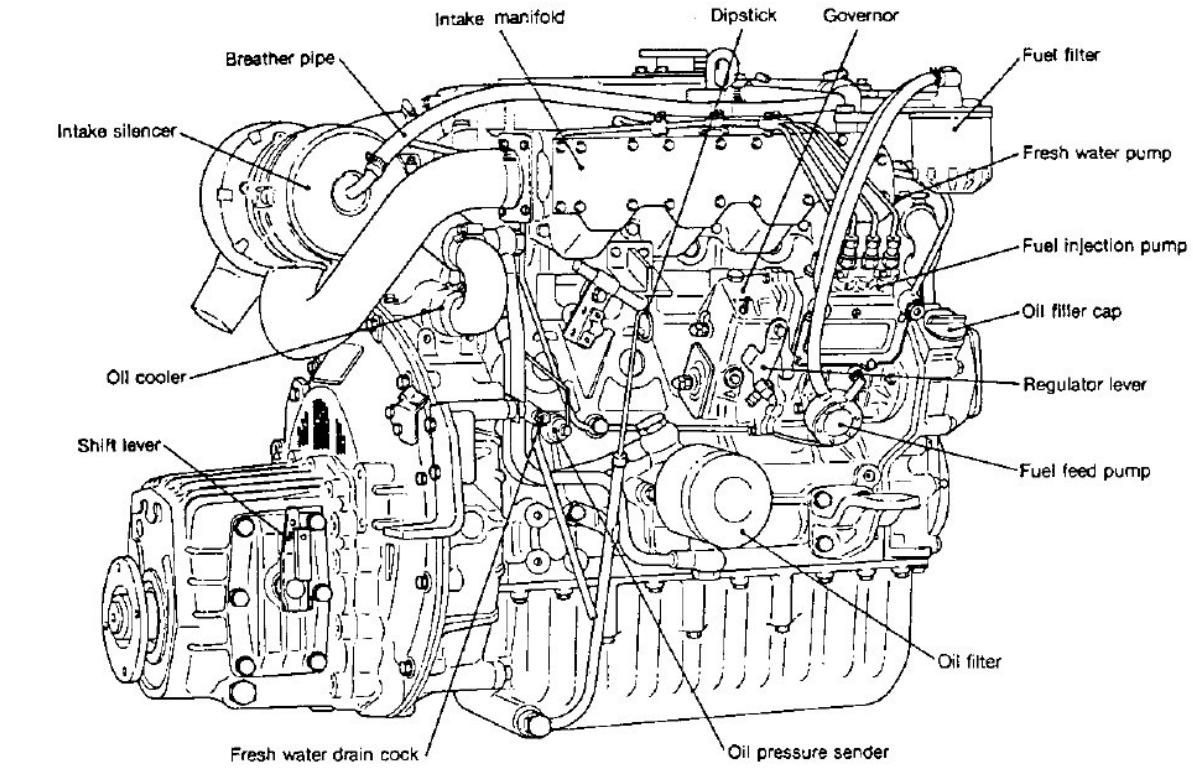


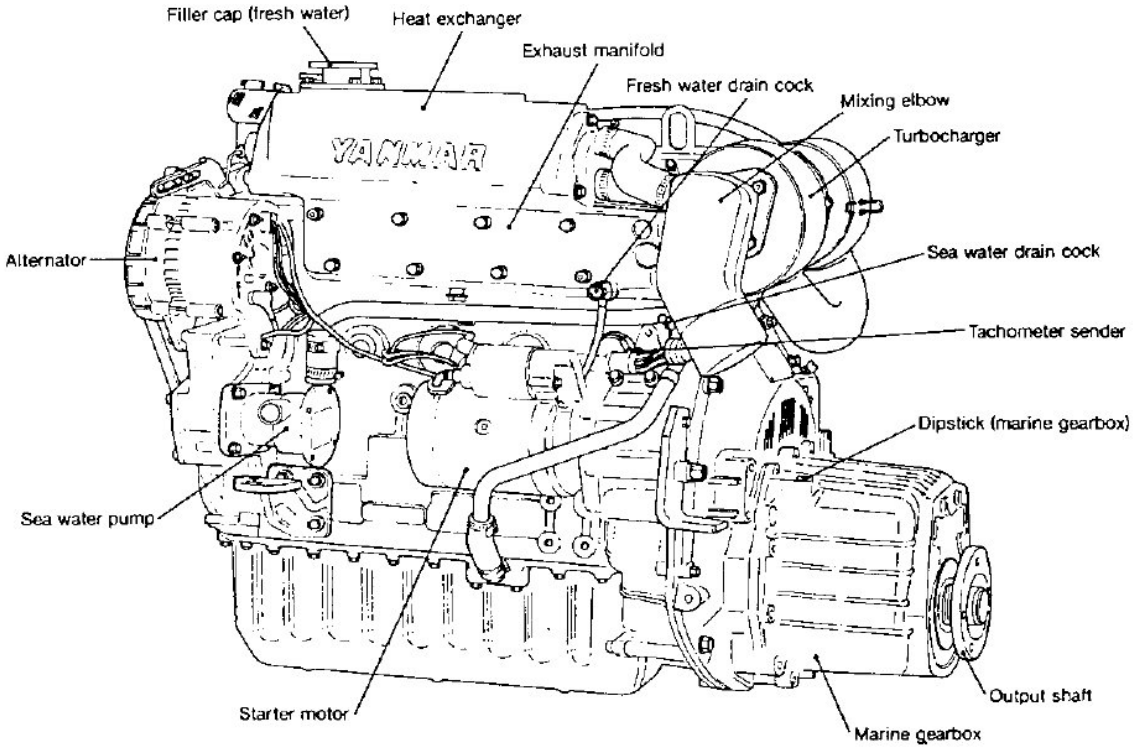


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1-2 4JH2-TE

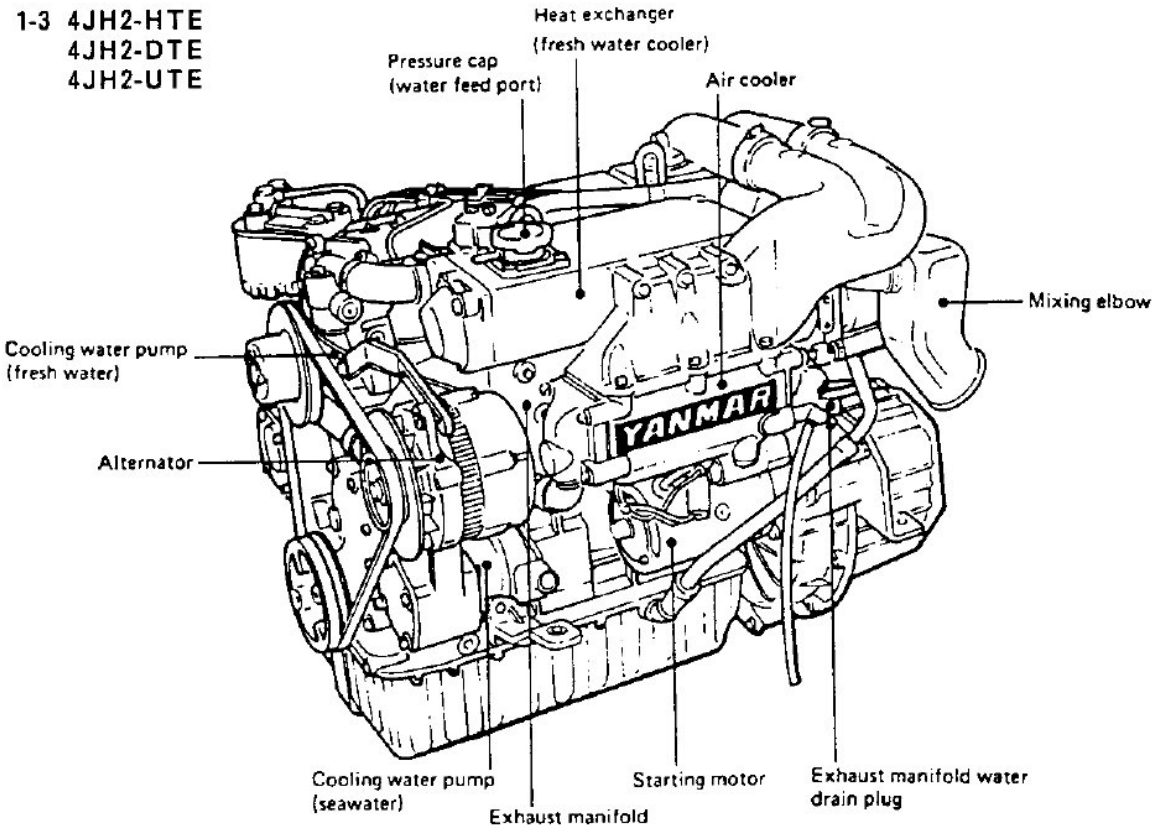


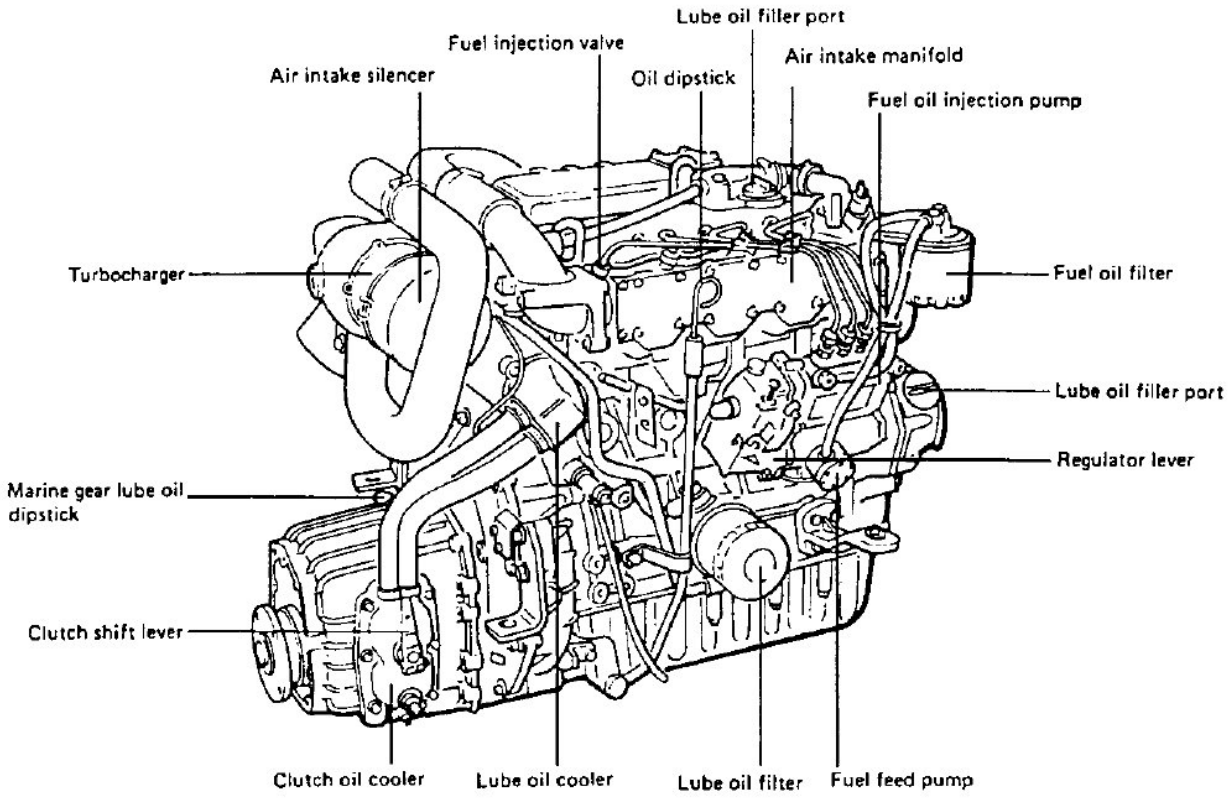


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1-3 4JH2-HTE 4JH2-DTE 4JH2-UTE





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2-2 Marine Gear

Marine gear system	Model		KBW10E		KM3A		
	Type		Multiple friction disc cluth (Parallel drive)		Cone clutch (Angle drive)		
	Reduction ration (Forward/Reverse)		2.14/2.50	2.45/2.50	2.33/3.04	2.64/3.04	3.21/3.04
	Direction of rotation (Forward) Viewed from starn		Clock wise		Clock wise		
	Lubricating oil capacity Effect/max.	ℓ (cu.in.)	0.2/0.7 (12.204/42.714)		0.05/0.35 (3.051/21.357)		
	Lubricating oil						
	Waight	kg (ib.)	17.5 (38.588)		13 (28.665)		

2-3 Applicability of Marine gear & Reduction ratio

● : Standerd combination
○ : Optional combination
× : Inapplicable

Marine gear / Engine model			3JH2E	3JH2-TE
Model	Reduction ratio	I.D Merk		
KBW10E	2.14	S	●	●
	2.45	G	●	●
	2.83	GG	●	×
KM3A	2.33	S	●	●
	2.64	G	●	●
	3.21	GG	●	×

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