YANMAR

HINSHI-H8009

SERVICE MANUAL

MARINE DIESEL ENGINE

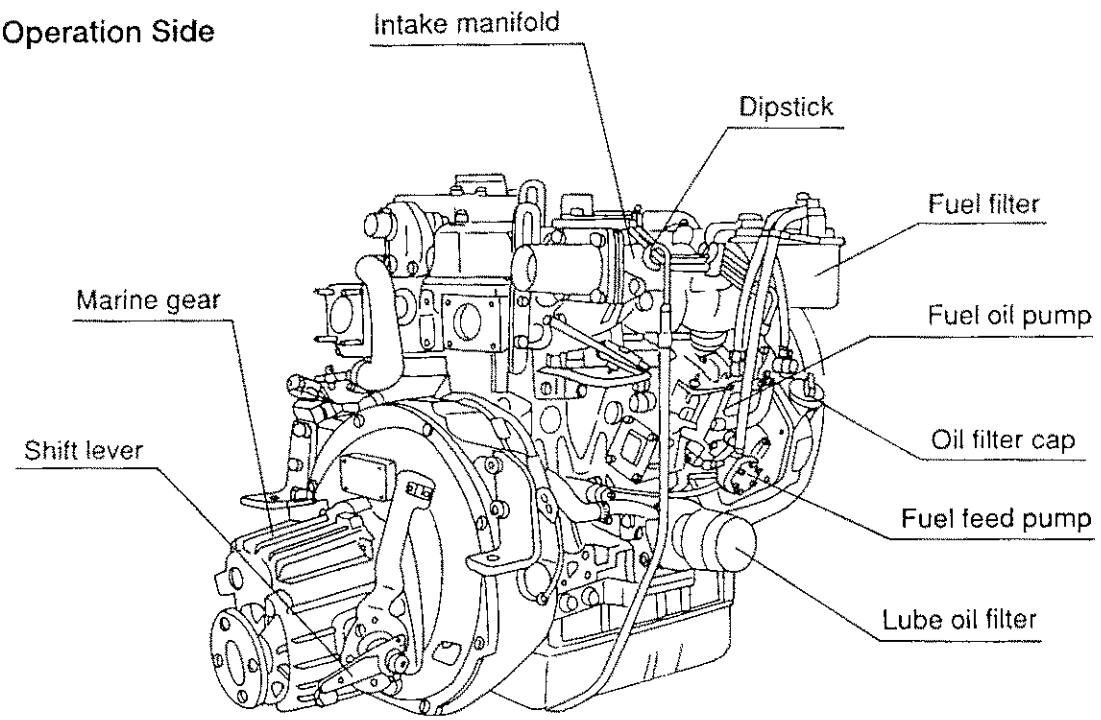
3JH3(B)(C)E(A),
4JH3(B)(C)E,4JH3CE1

2002.4

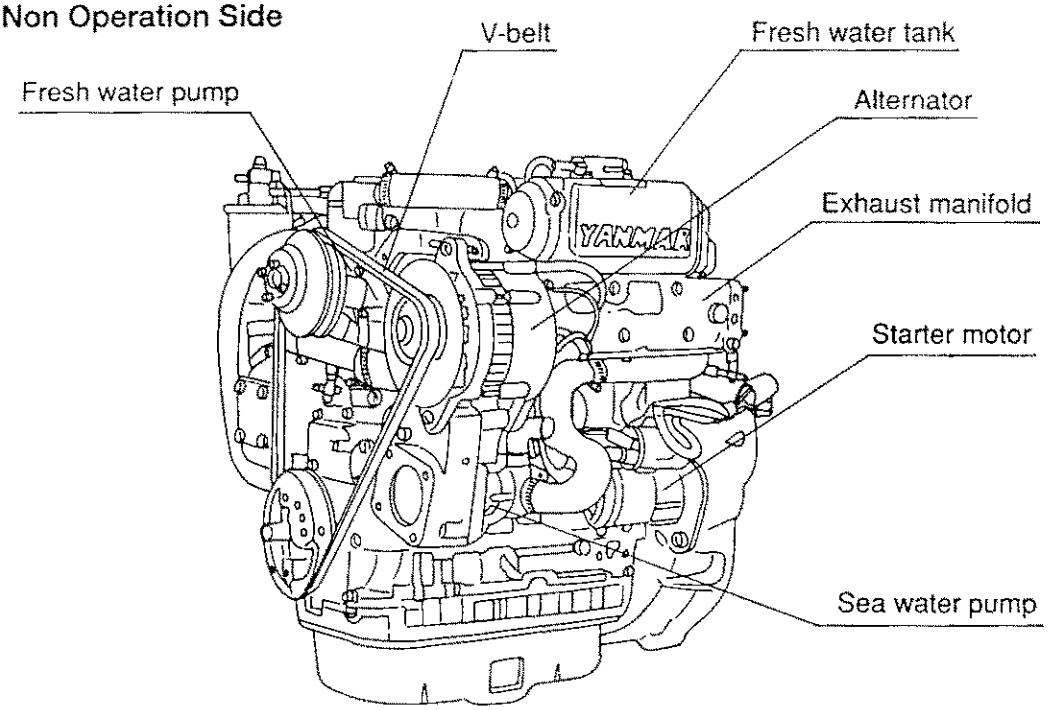
1. Exterior Views

1-1 3JH3E

• Operation Side



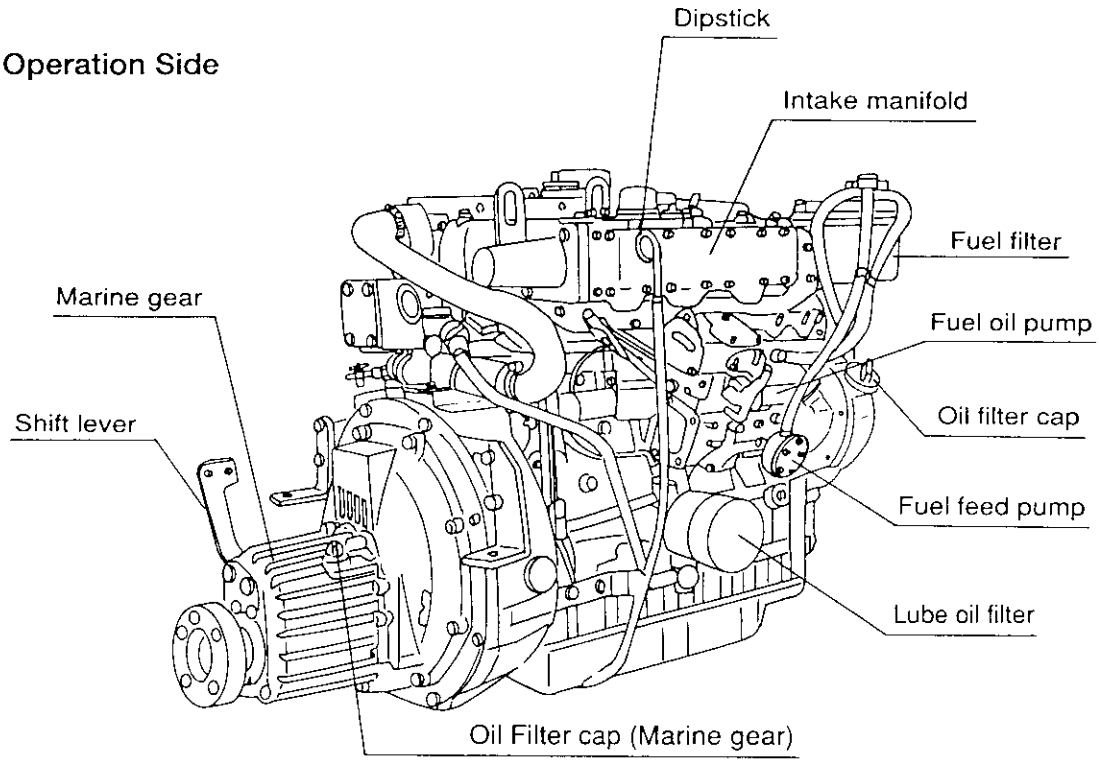
• Non Operation Side



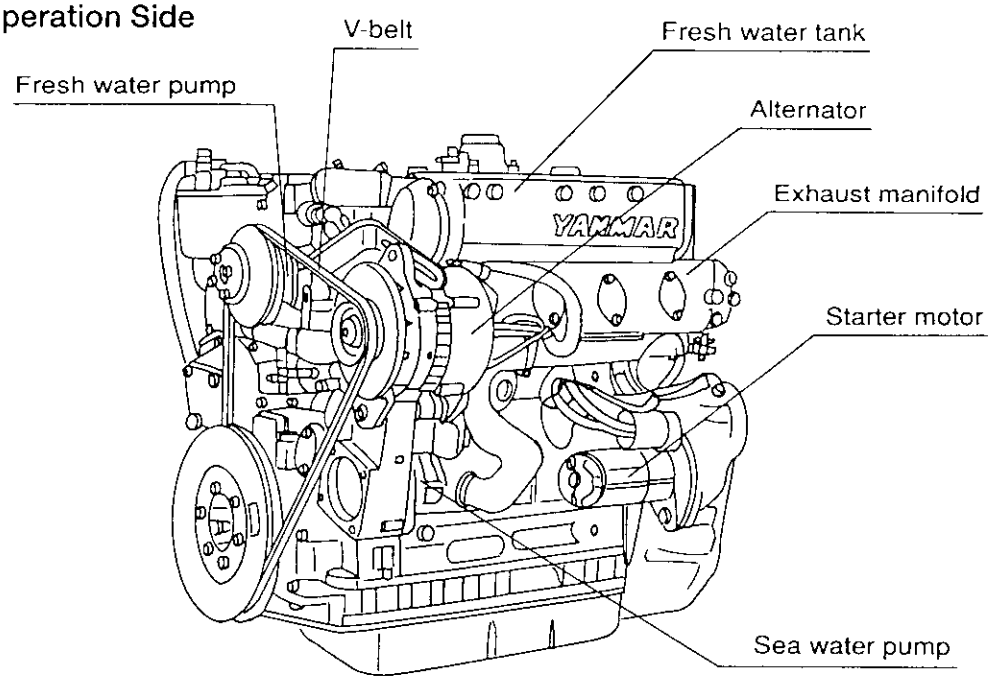
〈Note〉 This illustration shows Yanmar marine gear (Model : KM3P) when it has been attached.

1-2 4JH3E

● Operation Side



● Non Operation Side



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CHAPTER 2

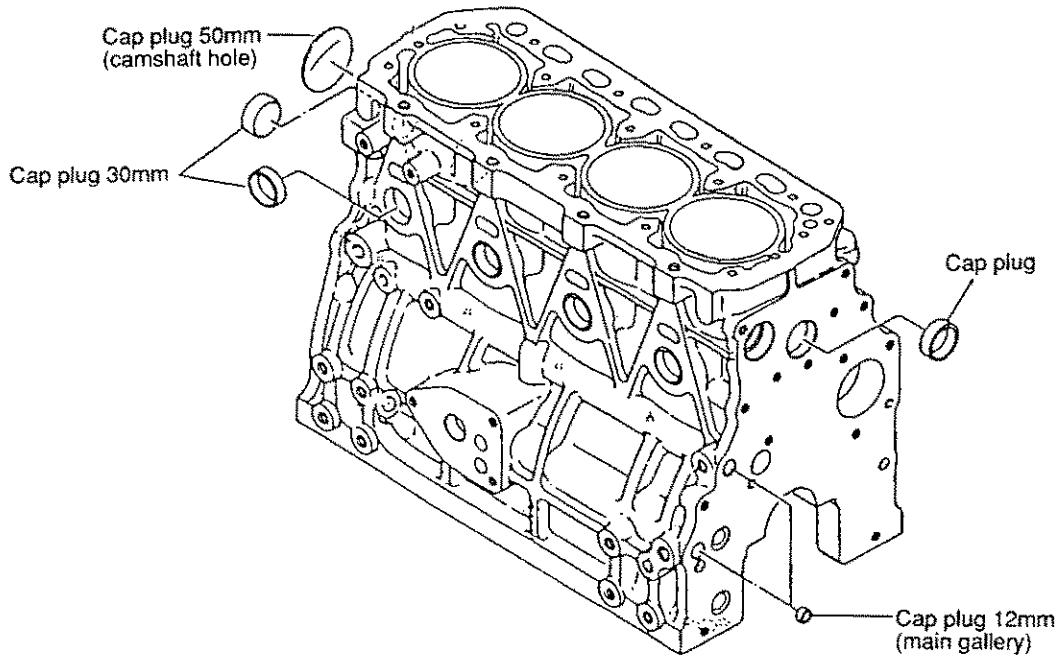
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1. Cylinder Block

The cylinder block is a thin-skinned, (low-weight), short skirt type with rationally placed ribs. The side walls are wave shaped to maximize ridigity for strength and low noise.



1-1 Inspection of parts

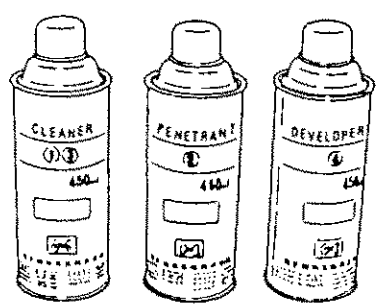
Make a visual inspection to check for cracks on engines that have frozen up, overturned or otherwise been subjected to undue stress. Perform a color check on any portions that appear to be cracked, and replace the cylinder block if the crack is not repairable.

1-2 Cleaning of oil holes

Clean all oil holes, making sure that none are clogged up and the blind plugs do not come off.

Color check kit

	Quantity
Penetrant	1
Developer	2
Cleaner	3



1-3 Color check procedure

(1) Clean the area to be inspected.
(2) Color check kit
The color check test kit consists of an aerosol cleaner, penetrant and developer.
(3) Clean the area to be inspected with the cleaner.
Either spray the cleaner on directly and wipe, or wipe the area with a cloth moistened with cleaner.
(4) Spray on red penetrant
After cleaning, spray on the red penetrant and allow 5 ~10 minutes for penetration. Spray on more red penetrant if it dries before it has been able to penetrate.
(5) Spray on developer
Remove any residual penetrant on the surface after the penetrant has penetrated, and spray on the developer. If there are any cracks in the surface, red dots or a red line will appear several minutes after the developer dries.
Hold the developer 300~400mm away from the area being inspected when spraying, making sure to coat the surface uniformly.
(6) Clean the surface with the cleaner.

NOTE : Without fail, read the instructions for the color check kit before use.

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