

YANMAR SERVICE NEWS

Title	Caution for Measuring Crank Deflection	No. : 03-2-G-03-006-L Date: March 2003	
Eng. Model	All Models	Applications	Marine Mains & Aux.; Industrial
		Engine Nos.	_____

When the crank deflection was measured after servicing the engine, the value at the minus side, (narrowing downward), sometimes turned out to be abnormally large.

This abnormally large deflection value was attributable to the supply of high temperature water into the engine and the resultant heating and expansion of the upper cylinder block having the cooling water jacket. In the case of the present engine in question, the crank deflection was measured again after extracting the cooling water and cooling the engine. As a result, the measurement value returned to the normal level.

1. Caution

We recommend measuring the crank deflection when the engine is cold in principle. If the minus side value, (narrowing downward), is abnormally large, check if or not the cylinder block was heated partially. Check that the relevant engine parts are cool uniformly. If the relevant engine parts are heated partially, measure the crank deflection again after cooling the engine.

The abnormally large value can appear in the following cases:

- When the measurement was made while the engine's cooling water was still hot.
- When the measurement was made after pouring hot water to the engine.
- When the measurement was made while the cylinder block was still hot after engine operation, (with lube oil not heated.)

In our past experience, the measurement values under the above conditions were approximately 2/10000~3/10000xS (stroke), narrowing downward.

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