

# YANMAR SERVICE NEWS

Subject	Corrosion of Intake Valve	No. : 12-2-G-01-001-O Jan. 2012
Engine Model	6EY18(A)L(W)	Use
		Engine Nos.

In a 6EY18(A)L(W) marine auxiliary engine, the intake valve corroded, was damaged and dropped off, which required the replacement of the cylinder head, turbocharger, piston and cylinder liner.

Upon inspection, the low temp. side CW inlet temperature was found to be low at about 22°C, which made it impossible to raise temperature even after adjusting the hull-side temp. regulating valve. This lowered the engine's low temp.-side CW intercooler inlet temp. and the boost temperature, (35~40°C), and caused the engine to be operated under excessively cooled state. As a result, condensed water was produced in the boost air, which reacted with sulfur contained in exhaust gas and sulfuric acid was produced, which caused the intake valve head to be corroded.

In order to prevent the similar trouble as above, we would like you to check the following points and to make improvement if problem was found:

### <Items to be Checked>

- Check if or not the temp. setting of the hull-side temp. regulating valve is as per the completion drawing, (36°C or 38°C)  
→If temperature won't be raised even after adjusting or raising the temperature setting, ask improvement to the shipyard.
- Check if or not the engine's low temp-side CW intercooler inlet temperature is appropriate. (Hull-side temp. regulating valve setting: approx. -2~0°C)  
→When temp. drop was excessive, check if or not the piping was cooled.  
→When the by-pass valve is installed at the engine side, adjust the valve.
- Check if or not the intake valve head has been corroded while servicing the cylinder head, (see photos below).  
→ Replace the valve if corrosion, cracks, etc. was found.



Enlarged



Corroded Intake Valve

**YANMAR CO.,LTD.**  
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QUALITY ASSURANCE DEPT.

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