KOBELCO

SERVICE MANUAL

DIESEL ENGINE

LK600A - NISSAN NE6T

8506343-13906-500-KIS(M)

APPLICABLE:
NE6-000001 ~

Issued: Jun. 1985

MidWestTech | Kobelco LK600A - Nissan NE6T Diesel Engine Service Manual | Publication SMENES1E02

Order the manual at mid-west-tech.com >

MEASURING BLOW-BY GAS PRESSURE

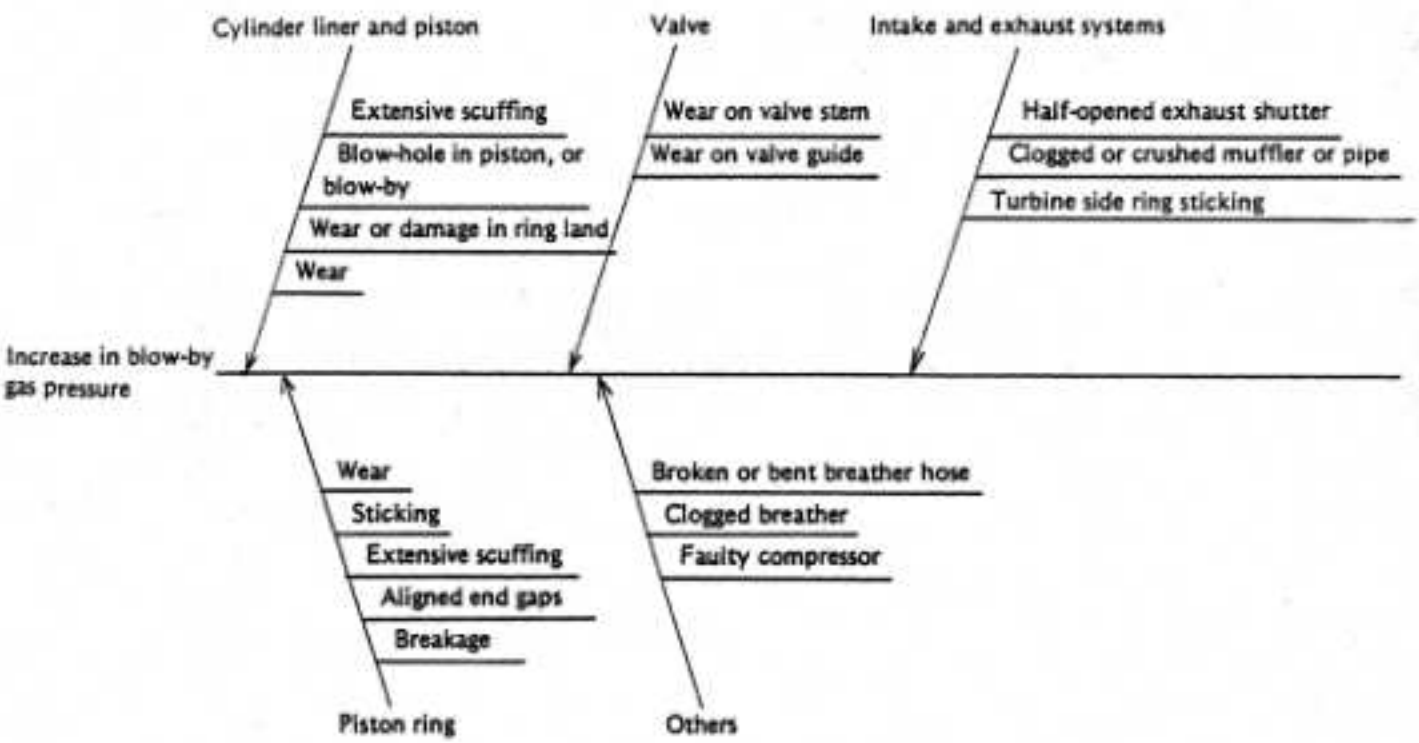
Measurement of blow-by gas pressure like measurement of compression pressure provides an important information, in deciding whether or not an engine should be overhauled.

Blow-by gas pressure (Warm engine at maximum rpm under no-load)
Maintenance standard
15, max. mmAq

Trouble symptom

Trouble symptoms that are attributable to excessive blow-by gas pressure are: low engine output, deterioration in oil or fuel consumption, emission of white smoke during high speed travelling, difficulty in starting, irregular engine operation, diesel knock, overheating, oil leakage from air breather or other areas, etc. If the blow-by gas pressure exceeds the service standard, compression pressure should also be measured, and then a decision should be made whether the engine requires overhauling.

Factors that may cause an increase in blow-by gas pressure



MidWestTech | Kobelco LK600A - Nissan NE6T Diesel Engine Service Manual | Publication... Order the manual at mid-west-tech.com >

Position	Item		Nominal dimension (mm)	Maintenance standard (mm)	Repair limit (mm)	Wear limit (mm)	Remarks
Full flow oil filter	Open short valve pressure		1.2 kg/cm²	1.0 - 1.4 kg/cm²	–	–	
	Short valve spring	Free length	74.5	–	–	–	
		Tension	–	2.5 - 2.8 kg	–	–	When compressed to 51.7 mm
Oil cooler	Open short valve pressure		3.3 kg/cm²	3.1 - 3.5 kg/cm²	–	–	
	Short valve spring	Free length	96.2	–	–	–	
		Tension	–	2.57 - 2.77 kg	–	–	When compressed to 60.8 mm
Regulator valve	Open valve pressure		3.5 kg/cm²	3.33 - 3.67 kg/cm²	–	–	
	Valve spring	Free length	37.6	–	–	–	
		Tension	–	5.12 - 5.66 kg	–	–	When compressed to 29.4 mm
Oil jet for cooling piston	Open valve pressure		2.0 kg/cm²	1.8 - 2.2 kg/cm²	–	–	
	Valve spring	Free length	18.5	–	–	–	
		Tension	–	0.73 - 0.81 kg	–	–	When compressed to 15.5 mm

COOLING SYSTEM

Position	Item	Nominal dimension (mm)	Maintenance standard (mm)	Repair limit (mm)	Wear limit (mm)	Remarks
Water pump	Clearance between housing and impeller	–	0.8 - 2.1	–	–	
	Clearance between water pump inlet and impeller	–	0.47 - 2.11	–	–	
	Fitting tolerance between shaft and impeller	–	0.04T - 0.07T	–	–	T: tight
Thermostat	Open valve temperature	76.5°C	75.0 - 78.0°C	–	Less than 71.5°C More than 81.5°C	
		82.0°C	80.5 - 83.5°C	–	Less than 77.0°C More than 87.0°C	
		88.0°C	86.5 - 89.5°C	–	Less than 83.0°C More than 93.0°C	

MidWestTech | Kobelco LK600A - Nissan NE6T Diesel Engine Service Manual | Publication... Order the manual at mid-west-tech.com >