



KH Engine Measurement Test Standard

KES T – C216

(EST) 1988-12-15

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Supplementary Provision

Relative Standard



1. Scope of Application

This standard is applicable for an KH engine and LX engine.

2. Purpose

The purpose of this standard is to grasp the part fitness, reliance test, quantity of abrasion and deformation, and cause of problem part.

3. Unit and Terminology

(1) Unit

The unit of this standard follows clause 5 in the KES A-A001 (writing basis for a technical standard)

(2) Terminology

The terminology in relation with measurement follows the measurement terminology standard.

4. Preparation before Measurement

- (1) The back ground temperature of a measurement room has to be maintained with the normal temperature ($20 \pm 2^{\circ}\text{C}$).
- (2) The part to be washed is rinsed out before the measurement.
- (3) Before the measurement, the soaking for more than 12hr is required as a fundamental rule.

5. Measurement

- (1) The measurement for part is carried out with a exclusive measuring device.
- (2) Carry out measurement successively on the basis of the measuring device in the appendix (KH engine, measurement check sheet).
- (3) Calculate oil clearance (1) in accordance with the measurement result.
- (4) If oil clearance of a part is contrary to the regulation, report this part quickly to be managed.

- (5) The part which measurement was finished is managed in accordance with its use, and measurement data are managed synthetically in a measurement room.

Annotation⁽¹⁾ : refer to the method for calculating oil clearance at clause 6.

6. Method for Calculating Oil Clearance

(1) Piston clearance

Clearance = the inside diameter of a liner-the outside diameter of a piston

Where, Inside diameter of a liner(2): Y direction at the 57mm point from the top of a liner

Outside diameter of a piston: major axis direction at the 57.25mm point from the top of a piston (CP point)

- (2) The clearances of other parts are calculated with the difference of facing part in measurement point.

Clearance = inside diameter-outside diameter

Annotation⁽²⁾: refer to appendix

Supplementary Provision

This standard was carried out from 15 December 1988.

Quoted Standard : KES A-A001 (writing basis for a technical standard)

KH (H07C) ENG.

Measurement Check Sheet

Engine test team
Test 1 staff

ENG. NO. :
Purpose of test :
W r i t e r :
Writing date :

KH measurement DATA	ENG . NO		CODE	
CLEARANCE	DATE Before After		Measurer	

PISTON CLEARANCE

192-224

	1	2	3	4	5	6
Before test						
After test						

MAIN BEARING CLEARANCE

51-101

	1	2	3	4	5	6	7
Before test							
After test							

CAM JOURNAL CLEARANCE

30-80

	1	2	3	4	5	6	7
Before test							
After test							

CON ROD BIG END

31-82

	1	2	3	4	5	6
Before test						
After test						

CON ROD SMALL END

15-36

	1	2	3	4	5	6
Before test						
After test						

CLEARANCE	ENG. NO				CODE			
	DATE		Before After		Measurer			

TAPET HOLE CLEARANCE

25-75

	1	2	3	4	5	6	7	8	9	10	11	12
Before test												
After test												

VALVE STEM CLEARANCE

IN55-88 EX70-103

	1		2		3		4		5		6	
	IN	EX	IN	EX	IN	EX	IN	EX	IN	EX	IN	EX
Before test												
After test												

VAVLE DEPTH

IN-0.10±0.15 EX-0.40±0.15

	1			2			3			4			5			6		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Before test																		
After test																		

PISTON TOPPING

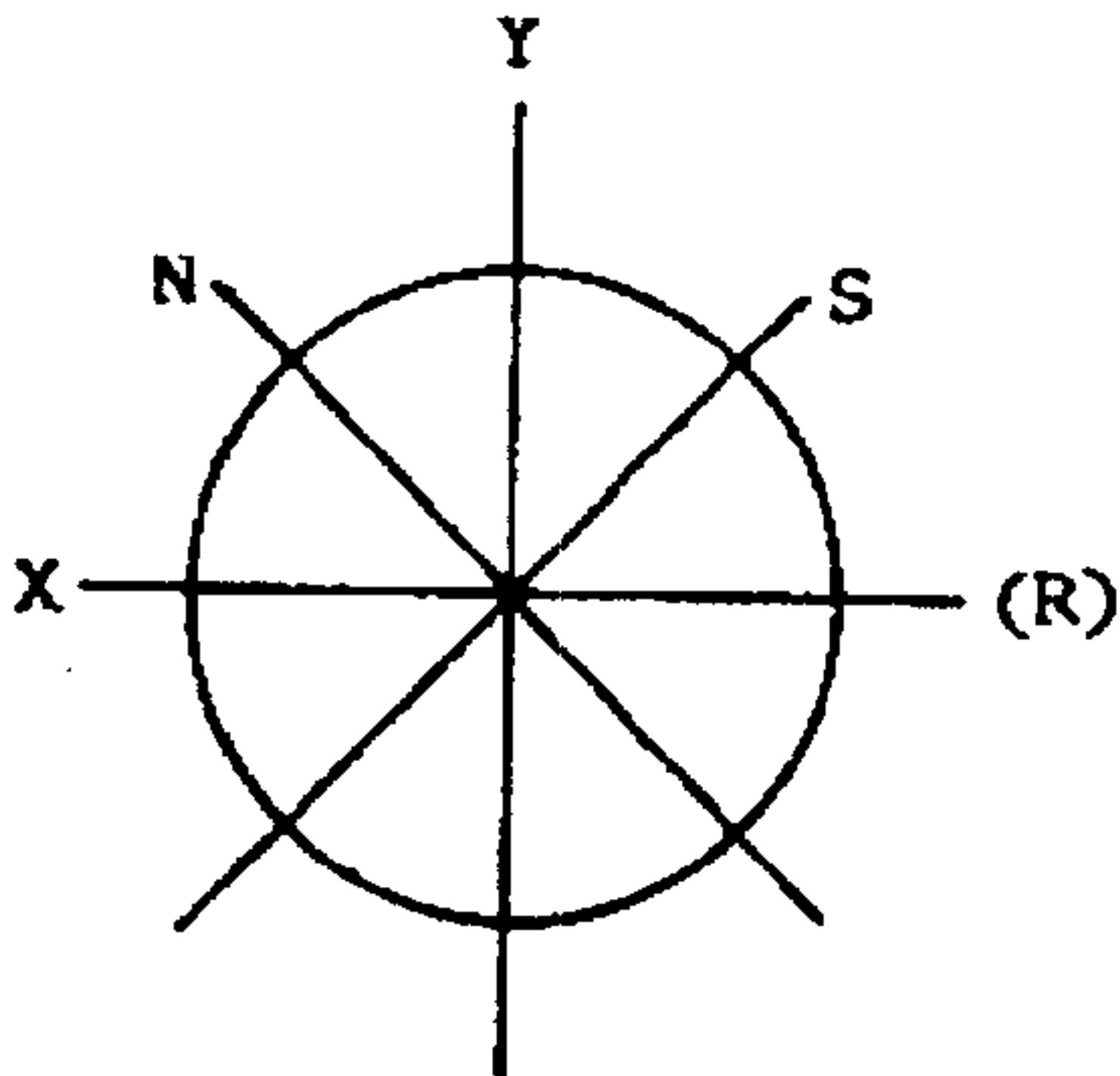
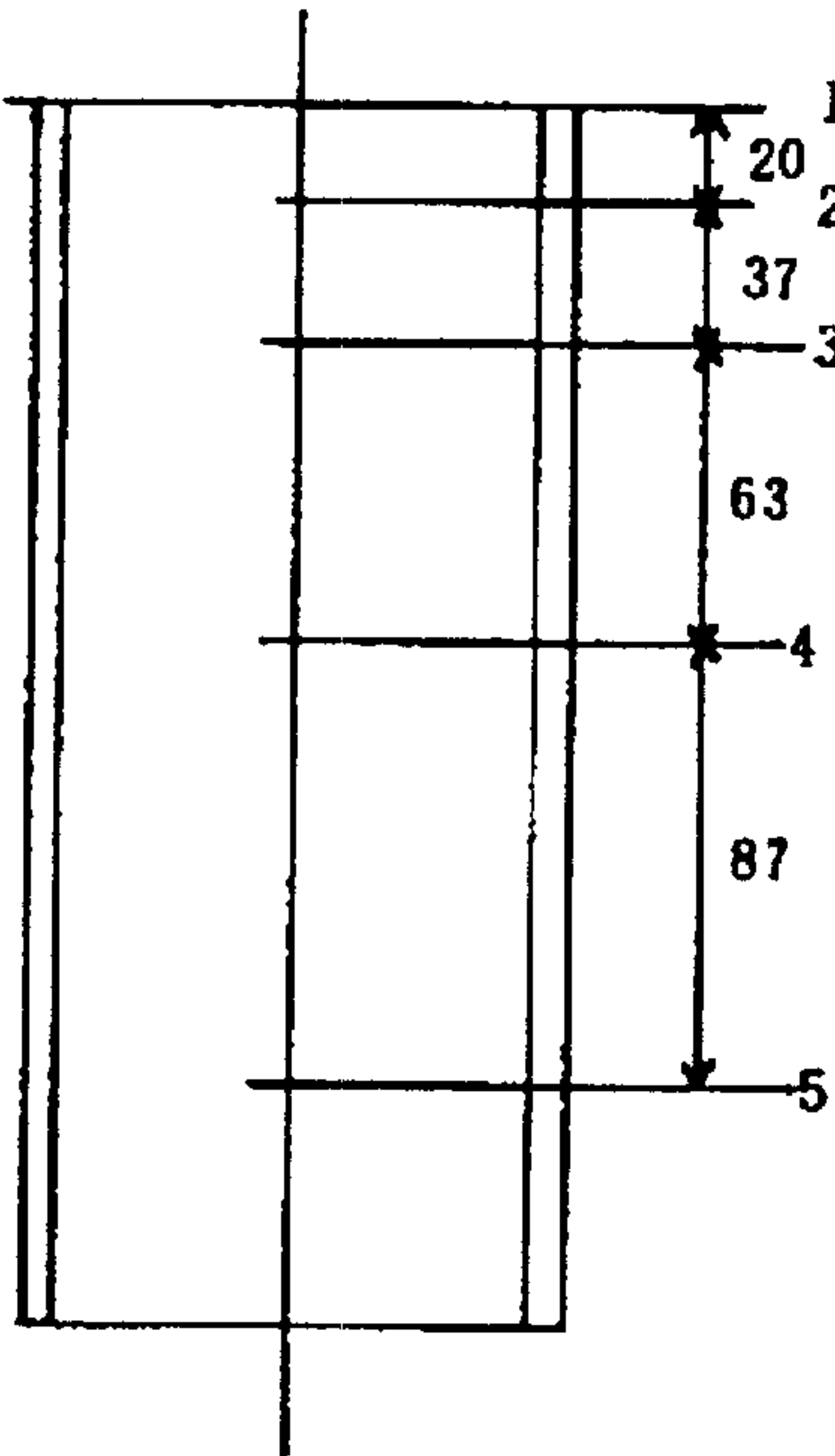
0.46±0.1mm

	1		2		3		4		5		6	
	A	B	A	B	A	B	A	B	A	B	A	B
Before test												
After test												

CYLINDER
LINER

CYLINDER

$\phi\ 110\ +0.040$
 $\ +0.008$



		Before test				After test			
		X	Y	N	S	X	Y	N	S
1 C Y L	1								
	2								
	3								
	4								
	5								
2 C Y L	1								
	2								
	3								
	4								
	5								
3 C Y L	1								
	2								
	3								
	4								
	5								
4 C Y L	1								
	2								
	3								
	4								
	5								
5 C Y L	1								
	2								
	3								
	4								
	5								
6 C Y L	1								
	2								
	3								
	4								
	5								