

# **SBL** South Bend Lathe

## **10 K** ACCURACY TEST REPORT

CL 370RD  
MODEL

NO 40969K  
SERIAL NUMBER

4-1/2 U. D.  
SIZE & BED LENGTH

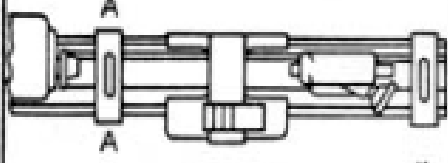
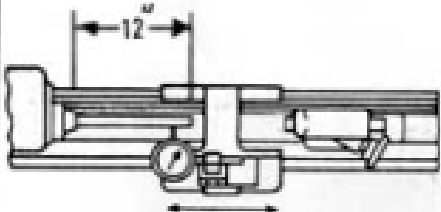
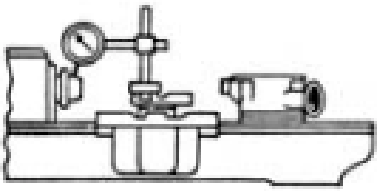

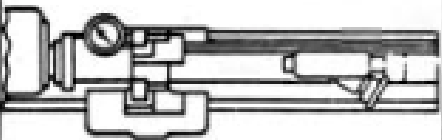

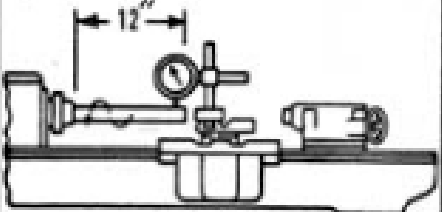
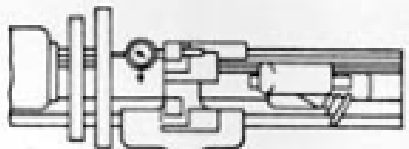
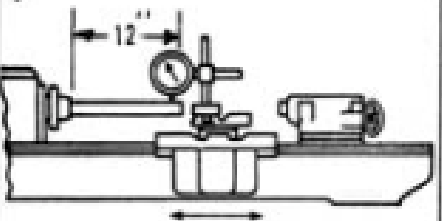

SEP. 9, 1983.  
DATE

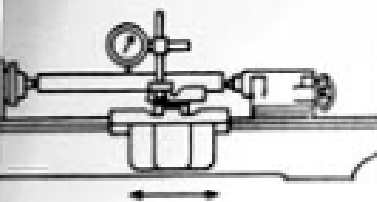

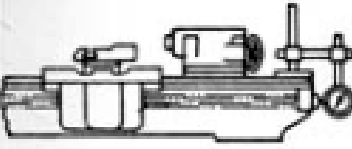
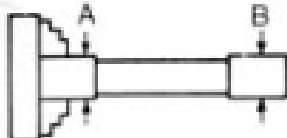
**SOUTH BEND LATHE**

AN EMPLOYEE-OWNED COMPANY

# SOUTH BEND LATHE ACCURACY CHART

AMERICAN NATIONAL STANDARD ANSI B5-16-1952

TEST	MAXIMUM ALLOWABLE ERROR ACTUAL	TEST	MAXIMUM ALLOWABLE ERROR ACTUAL
<p>1</p>  <p style="text-align: center;">Bed Level</p>	<p>A-A=0 X=.0005</p> <hr style="width: 50%; margin: auto;"/> <p>.0001</p>	<p>6</p>  <p style="text-align: center;">Headstock Alignment--Horizontal</p>	<p>.001</p> <hr style="width: 50%; margin: auto;"/> <p>.0006</p>
<p>2</p>  <p style="text-align: center;">Spindle Nose Runout</p>	<p>.0004</p> <hr style="width: 50%; margin: auto;"/> <p>.0002</p>	<p>7</p>  <p style="text-align: center;">Tailstock Spindle Alignment--Horizontal</p>	<p>.0005</p> <hr style="width: 50%; margin: auto;"/> <p>.0003</p>
<p>3</p>  <p style="text-align: center;">Cam Action of Spindle</p>	<p>.0005</p> <hr style="width: 50%; margin: auto;"/> <p>.0002</p>	<p>8</p>  <p style="text-align: center;">Tailstock Spindle Alignment--Vertical Spindle Fully Extended</p>	<p>.0008</p> <hr style="width: 50%; margin: auto;"/> <p>.0006</p>
<p>4</p>  <p style="text-align: center;">Spindle Taper Runout</p>	<p>.0008</p> <hr style="width: 50%; margin: auto;"/> <p>.0006</p>	<p>9</p>  <p style="text-align: center;">Cross Slide Alignment Concave Only</p>	<p>.001</p> <hr style="width: 50%; margin: auto;"/> <p>.001</p>
<p>5</p>  <p style="text-align: center;">Headstock Alignment--Vertical</p>	<p>.001</p> <hr style="width: 50%; margin: auto;"/> <p>.0006</p>	<p>10</p> <p>Readings for base length bed taken with lead screw stationary. Add 0.001 inch for each additional 4 feet of bed length</p>  <p style="text-align: center;">Lead Screw Alignment</p>	<p>PARALLEL WITH WAY</p> <p>Horizontal - .004</p> <p>Vertical - .004</p> <hr style="width: 50%; margin: auto;"/> <p>H - .004</p> <p>V - .004</p>

TEST	MAXIMUM ALLOWABLE ERROR ACTUAL	TEST	MAXIMUM ALLOWABLE ERROR ACTUAL		
 <p>Vertical Alignment of Head and Tail Centers</p>	.0015	<p>14</p>  <p>Lathe Must Turn Round With Work Mounted In Chuck</p>	.0004		
 <p>Lead Screw Cam Action</p>	.001	<p>15</p> <p>Back Lash on Cross Feeds Screw</p>	.004	.004	
		<p>On Compound Rest Screw</p>	.004	.004	
<p>CUTTING TEST</p>  <p>Must Turn A &amp; B Dia. the Same</p>	.0003	<p>16</p> <p>Head Stock Lift Test Rear &amp; Front</p>	F-.001	.001	
		<p>17</p> <p>Head Stock End Play Test (Must Turn Free When Cold)</p>	R-.001	.0008	
		<p>18</p> <p>Taper Attachment Cutting Test</p>	OK		
		<p>19</p> <p>Hand Lever Collet Attachment</p>	-		
		<p>VIBRATION TEST</p>	1.5 mils - Max.		
		<p>At Headstock</p>	-		
		<p>At Saddle</p>	-		
		<p>At Tailstock</p>	-		
<p>At Underneath Drive</p>	-				
		Cross Feed Gear	STD	Rack Pinion Gear	STD

This lathe was tested and inspected to the accuracy recorded in this report by:

**INSPECTOR No.1**

We at South Bend Lathe are sure you will have many years of satisfactory service from this machine.

We are constantly working to make South Bend Lathe machine tools the BEST on the market.

We welcome your comments and suggestions regarding this machine or our other products.

PLEASE RETURN ATTACHED CARD



TO  
SBL Quality Assurance Dept.

Model No. \_\_\_\_\_

Serial No. \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Name \_\_\_\_\_

Customer \_\_\_\_\_

Address \_\_\_\_\_

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