

No. 99MBF101B  
SERVES No. 515

# セラキャリパチェツカ Cera Caliper Checker

ユ-ザ-ズ マニュアル

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User's Manual

ご使用前にこの「ユーザーズマニュアル」をよくお読みの上、  
正しくお使いください。お読みになった後は、  
いつでも見られる所に必ず保管してください。

Read this User's Manual thoroughly before operating the  
instrument. After reading, retain it close at hand for future reference.

**Mitutoyo**

# User's Manual

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## Cera Caliper Checker

**Mitutoyo**

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## 1. OVERVIEW

The Mitutoyo Cera caliper Checker is a reference standard designed to check the accuracy of calipers and height gages. It has employed ceramic (ZrO<sub>2</sub>) reference blocks and base block in order to enhance the abrasion resistance of the measuring surfaces. This allows the Cera caliper Checker to maintain its high measuring accuracy for long period of time. In order to obtain the best possible performance and longest service life of your Cera caliper Checker, read this user's manual carefully prior to operation.

## 2. AVAILABLE MODELS

Code. No.	Name	Measuring range
515 - 555	CC - 300C	20 ~ 300mm
515 - 556 - 2	CC - 600C	20 ~ 600mm
515 - 565	CC - 12" C	1 ~ 12"

## 3. COMPONENTS

The Cera caliper Checker consists of the following components shown below.

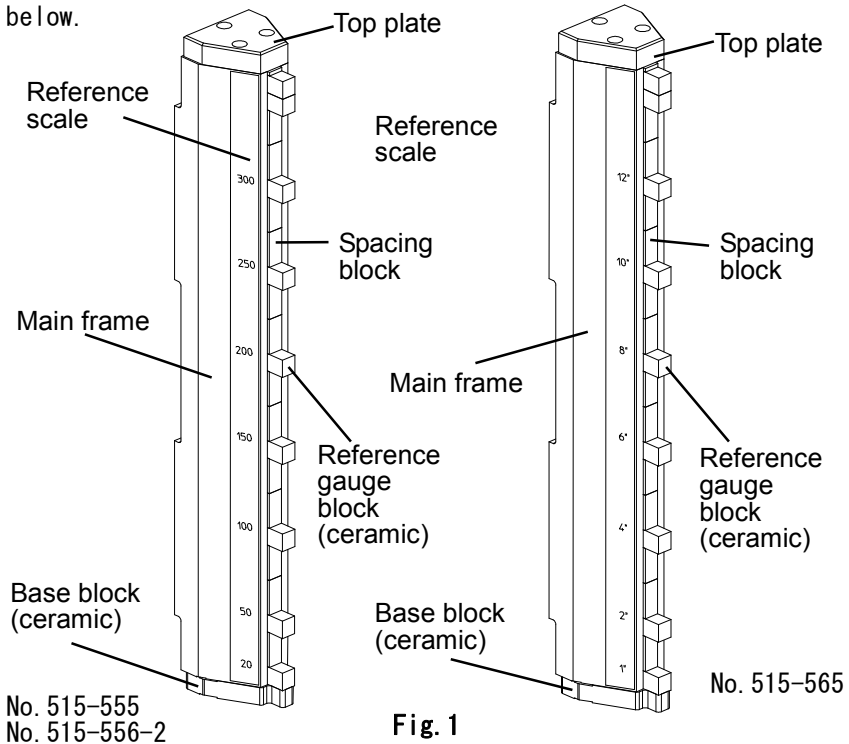


Fig. 1

#### 4. FUNCTIONS

Code.No. Item	515-555	515-556-2	515-565
Name	Cera Caliper Checker CC-300C	Cera Caliper Checker CC-600C	Cera Caliper Checker CC-12"C
Measuring range			
Outside measurement	20, 50, 100, 150 200, 250, 300	20, 50, 100, 150 200, 250, 300, 350, 400, 450, 500, 550, 600	1", 2", 4", 6", 8", 10", 12"
Inside measurement	20, 50, 100, 150 200, 250, 300	20, 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600	1", 2", 4", 6", 8", 10", 12"
Height measurement	20, 50, 100, 150 200, 250, 300	20, 50, 100, 150 200, 250, 300, 350, 400, 450, 500, 550, 600	1", 2", 4", 6", 8", 10", 12"
Mass	Approx.4kg	Approx.8.5kg	8.8lbs.

#### 5. SPECIFICATIONS

Code.No. Item	515-555	515-556-2	515-565
Deviation of central length	$\pm 0.005\text{mm}$	$\pm 0.005\text{mm}$ (for a length 300mm or less) $\pm 0.007\text{mm}$ (for a length more than 300mm)	$\pm 0.0002''$
Variation in length	0.002mm	0.002mm (for a length 300mm or less) 0.004mm (for a length more than 300mm)	0.00008"
Surface roughness of measuring surfaces	Ry 0.08	Ry 0.08	Ry 0.08
Hardness of gauge blocks	HV 1350	HV 1350	HV 1350

## 6. OPERATION

This instrument is designed to check the accuracy of calipers and height gages. In each type of use, please note the following points.

### 6. 1 Method of Accuracy Checks

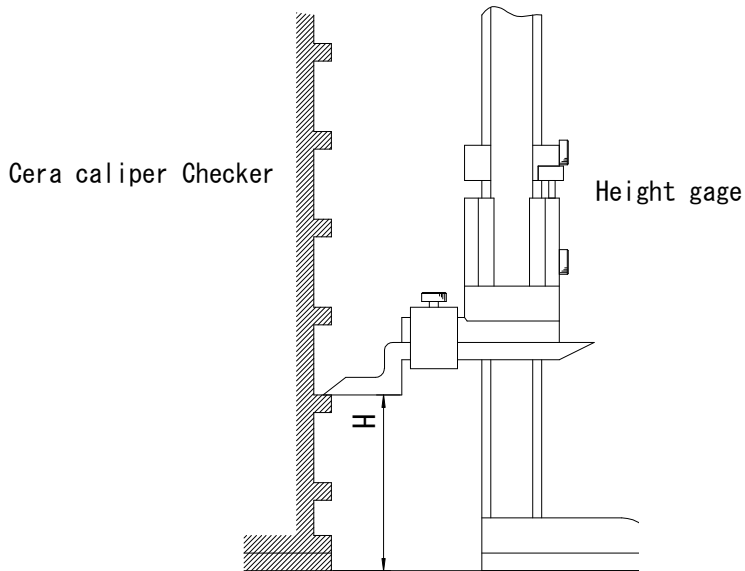


Fig. 2 Checking the height gage accuracy

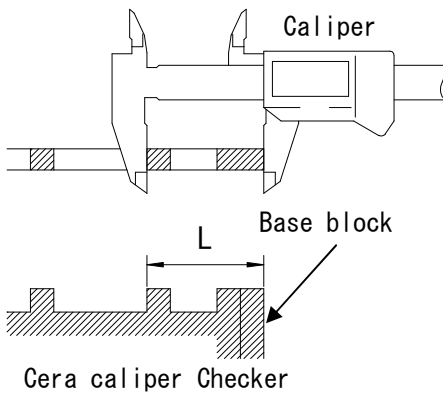


Fig. 3 Checking the caliper  
(outside measurement accuracy)

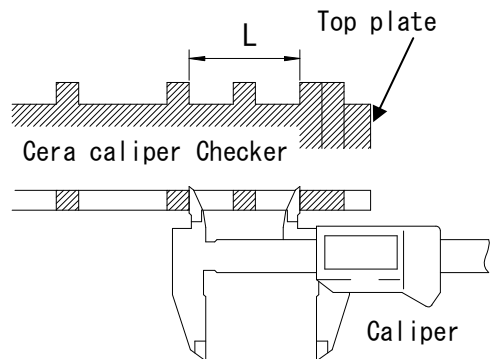
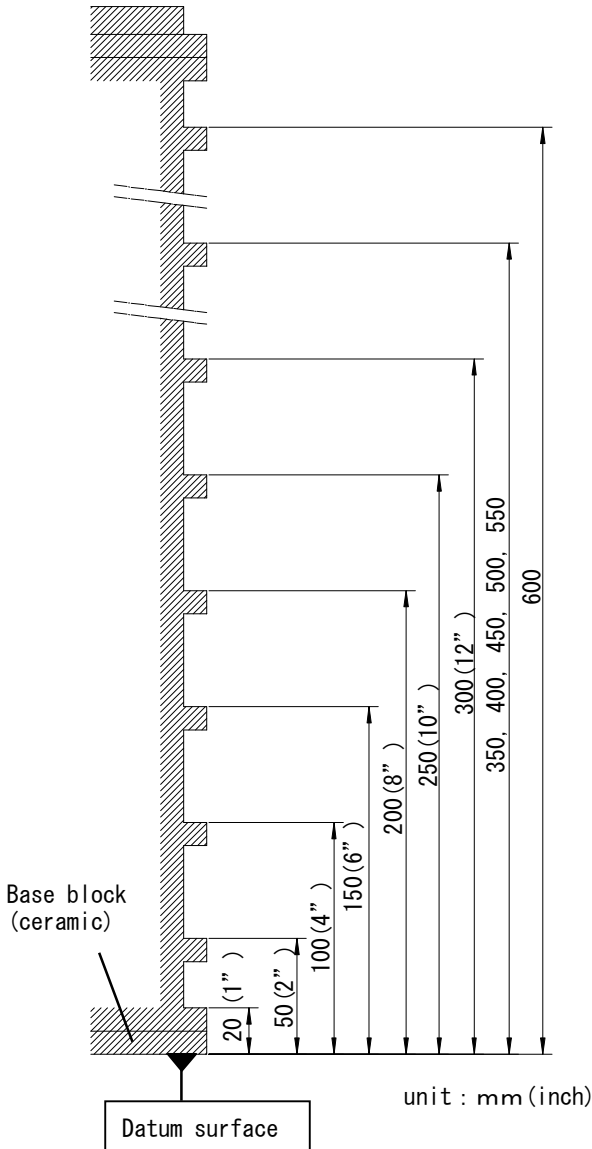


Fig. 4 Checking the caliper  
(inside measurement accuracy)

## 6. 2 Reference Dimensions

- Reference Dimensions for checking the height gage or caliper (outside-measurement accuracy)



- CC-300C Measuring range  
20, 50, 100, 150,  
200, 250, 300

- CC-600C Measuring range  
20, 50, 100, 150,  
200, 250, 300, 350,  
400, 450, 500, 550,  
600

- CC-12" C Measuring range  
1" , 2" , 4" , 6" ,  
8" , 10" , 12"

Fig. 5

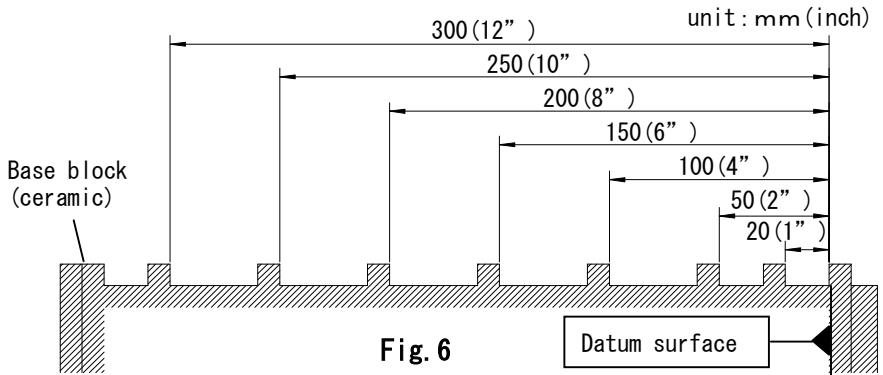
● Reference Dimensions for checking the caliper  
(inside-measurement accuracy)

• CC-300C Measuring range

20, 50, 100, 150, 200, 250, 300

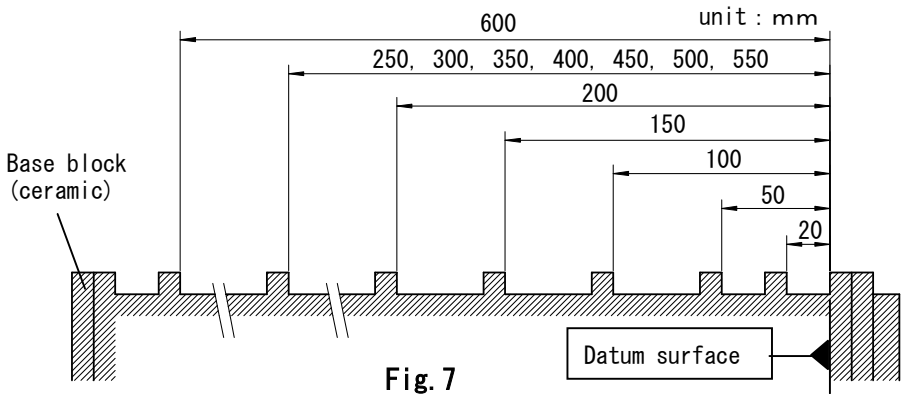
• CC-12" C Measuring range

1" , 2" , 4" , 6" , 8" , 10" , 12"



• CC-600C Measuring range

20, 50, 100, 150, 200, 250, 300, 350, 400,  
450, 500, 550, 600





## 7. STANDARD ACCESSORIES

- 1) Vinyl cover
- 2) User' s Manual
- 3) Inspection certificate

## 8. OPTIONAL ACCESSORIES

Wooden box No. 515-555, No. 515-565 . . . Order No. 602162  
No. 515-556-2 . . . . . Order No. 602164

## 9. PRECAUTIONS ON HANDLING

- 1) Handle with care so that it is not subjected to impact when you carry it or place it on the surface plate.
- 2) Before starting operation, wipe off dust from the measuring surfaces of the gauge blocks with a clean cotton cloth or gauze. After use, lightly apply high-quality anti-corrosive oil to the spacing blocks.
- 3) Before you use the Cera Caliper Checker on a surface plate, wipe the surface plate clean.
- 4) As the gauge blocks and spacing blocks have been precisely assembled and adjusted at the factory, never disassemble the Cera Caliper Checker for re-adjustment.  
Should a malfunction occur on the Cera Caliper Checker, leave it as-is and contact your dealer or the nearest Mitutoyo sales office.

# SERVICE NETWORK

## Mitutoyo America Corporation

### Illinois Repair Service

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