



Part No. **8400K**  
**Digital Optical  
Micrometer Kit**

A maintenance tool specifically designed to quickly and effectively determine the severity of surface damage.

• **Exact and repeatable.**

Very specific tolerances often apply to surface damage and **exact measurements are essential** to determine if a part should remain in service. The 8400K allows “*repair or replace*” maintenance decisions to be made with **absolute certainty**, and backed up with **precise measurement data**.

• **Eliminate Guesswork.**

**Quickly and confidently** perform visual inspections and make **real assessments of damage severity**. **Avoid using substandard parts or scrapping parts** that are still within safety and tolerance limits.

• **Portable and Versatile.**

The kit has interchangeable bases and lenses for use on almost any surface, including transparencies and composites. **Use one tool to inspect many types of damage**; corrosion pitting, scribe lines, bubbles, crazing, and scratches on parts.

• **Simple Operation.**

Unlike analog models, the 8400K is **repeatable and requires no manual calculations**. The digital LCD display is easy to read and toggles between inches and millimeters. Optional accessories allow data to be exported to a PC or handheld device.

**Take the guesswork  
out of visual inspection.**



**APPLICATIONS**

Inspect Damage on

- Windshields
- Canopies
- Fuselage Skins
- Shafts, Masts, Rotors
- Mechanical Parts
- Leading Edges
- Propellers
- Composites

and many other applications.

JOHN CHADWICK CORPORATION  
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## Part No. **8400K** Digital Optical Micrometer Kit



### “Repair or Replace?”

- Fast, accurate and repeatable measurements of surface damage to parts.
- Replace the “*finger nail test*” with a precise tool **and make maintenance decisions with confidence.**
- **Save Time and Money.** Quickly determine the severity of damage. Avoid scrapping parts that are still within tolerance limits.
- Read and record results easily from clear digital LCD display, or export directly to a PC.
- Improve traceability, **quality control** and monitor trends over time.



The 8400K kit is durable and portable for easy use on or off an aircraft, in the shop or in the field.

### TECHNICAL DATA

#### Dimensions & Weight

Micrometer with Base 3”DIA x 9”H, 1.5 LBS  
Kit in Case 13”L x 11”W x 6”H, 7 LBS

**Accuracy** Range  
+/- 0.001”/0.01mm 0.25” (10X), 1.2”(4X)

**Resolution**  
0.0005”/0.01mm

### FEDERAL AGENCIES

8400K is National Stock No.  
**NSN 6650-01-220-8942**

CCR & ORCA Registered  
Cage Code **65956**

Available on **GSA** contract No.  
**GS-24F-0043N**

Visit [www.gsaAdvantage.gov](http://www.gsaAdvantage.gov) for details.

#### Part No. 8400K is a kit & includes:

- 8400-0 **Digital Optical Micrometer** with LCD display
- 8400-7 **3-Leg Base** with plastic tipped feet to protect surface finish
- 8400-8 **4-Leg Base**
- 8400-9 **V-Block Base**
- 8400-14 **20X Eyepiece**
- 8400-15 **10X Eyepiece** with a reticle scale for visual width measurements
- 8400-16 **10X Objective Lens**
- 8400-17 **4X Objective Lens**
- 9400-23 **LED Flashlight**
- 8400-15 **Foam lined, ABS plastic case**
- 8400-32 **Scratch Sample Plate** for training and demonstration
- Allen Wrench, Spare Batteries**
- Manual, Calibration Certificate**



Each kit includes a test plate engraved with different depth scratches for training.



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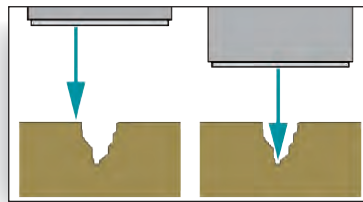
## How It Works

Simple operation produces quick, precise and repeatable surface damage measurements - without manual calculations.

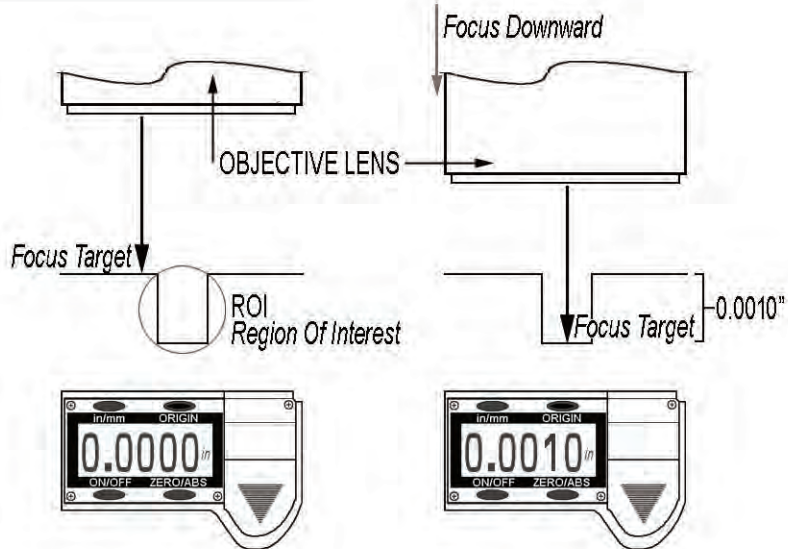
The 8400K measures the distance between two points, or regions of interest (ROI). Clear, accurate results are produced in three easy steps.

Step one is to focus on the first ROI, generally the good surface next to a scratch or pit. When the first ROI is in sharp focus, the display is set to zero with the touch of a button. The last step is to focus on the second ROI, the bottom of the scratch or pit. When the second ROI is in sharp focus the depth of the scratch, the distance between the two points, is shown on the digital LCD display.

Read and record the results - or export directly to a PC spreadsheet or hand held processor (requires optional accessories). It's that easy and takes less than a minute!



Accurate Results in 3 Steps:  
 Step 1 - Focus on 1st Target  
 Step 2 - Set Display to Zero  
 Step 3 - Focus on 2nd Target



Clear, easy to read results.

