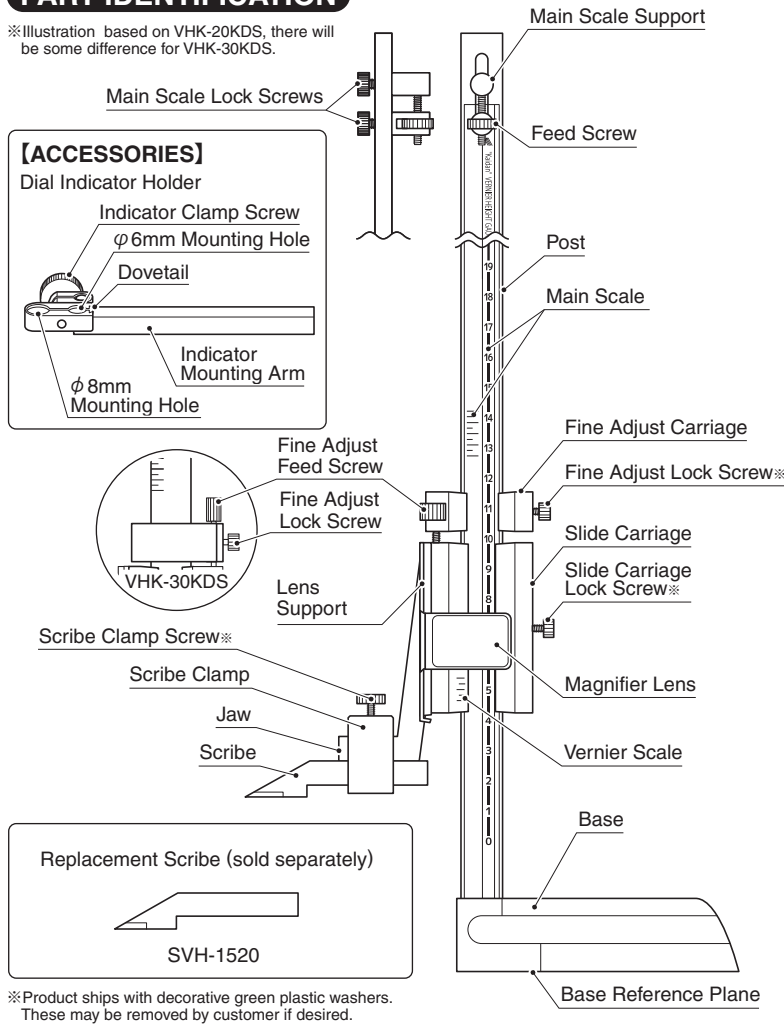


Thank you for purchasing the VERNIER HEIGHT GAUGE with K Aidan Scale.
Please read this manual thoroughly before use for proper operation.

PART IDENTIFICATION

※Illustration based on VHK-20KDS, there will be some difference for VHK-30KDS.



APPLICATIONS AND FEATURES

- Ideal for marking and measuring work for molds, jigs, and tooling.
- Easy to read 1mm K Aidan (stepped) scale.
- "Dot" markers every 2mm allows for quick reading of scale.
- Decimal points on vernier scale make it easier to read together with main scale.
- Easy to read scale using 3x magnifying lens.
- Carbide tipped scribe.
- Made of stainless steel for rust protection.
- Dial Indicator mounting arm accepts φ6mm, φ8mm, and dovetail type indicators.

SPECIFICATIONS

(Units:mm)

	VHK-20KDS	VHK-30KDS
Measuring Range	200	300
Graduation	0.05	0.02
Accuracy	±0.05	±0.04
Slide Carriage Fine Adjustment Range	approx. 8	approx. 8
Accessories	<ul style="list-style-type: none"> • Dial Indicator Holder • Scribe • Scribe Clamp • Magnifier Lens 	

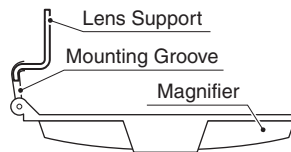
NOTES

- Before using for the first time, please wipe off the corrosion protectant with an oiled cloth.
- This is a precision instrument, handle with care. Do not drop or subject to excessive forces.
- Please avoid damage to post. Also, do not scratch instrument, for example by writing ID number.
- Keep away from direct sunlight. Do not store instrument in extreme temperatures.

OPERATION

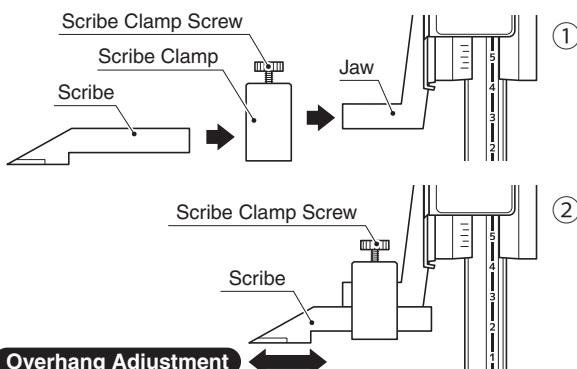
1 Mounting the Magnifying Lens

Slide the magnifying lens onto the lens support from the top, with the support inside the mounting groove.



2 Installing the Scribe

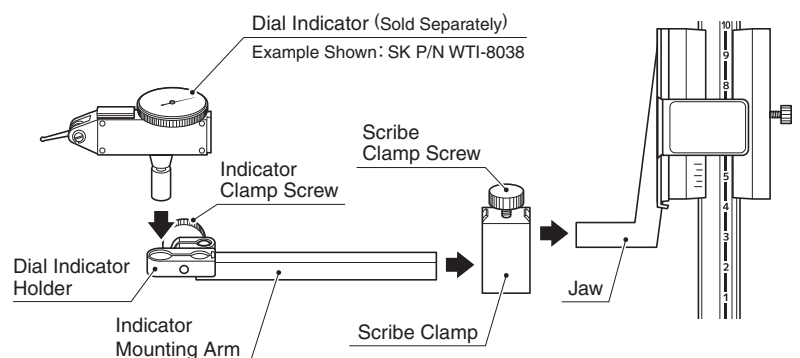
1. Loosen the scribe clamp screw and insert the scribe into the scribe clamp. (Figure : ①)
2. After inserting the scribe, adjust to desired overhang and tighten clamp screw. (Figure : ②)



3 Dial Indicator Holder

The supplied dial indicator holder can be used in place of the scribe to mount a dial indicator (sold separately).

1. Attach the dial indicator (sold separately) to the dial indicator holder. Secure by tightening clamp screw.
2. Loosen the scribe clamp screw and insert the holder arm into the scribe clamp in place of the scribe.
3. After inserting the dial indicator holder, adjust to desired overhang and tighten clamp screw.



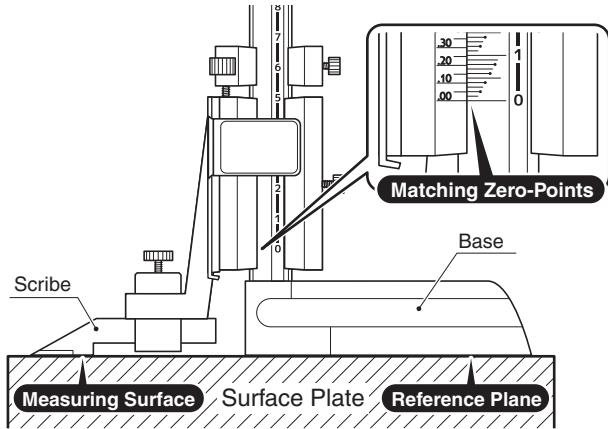
Reverse Side -- How to Use →

ZERO-POINT SETTING

※Illustration based on VHK-20KDS, there will be some difference for VHK-30KDS.

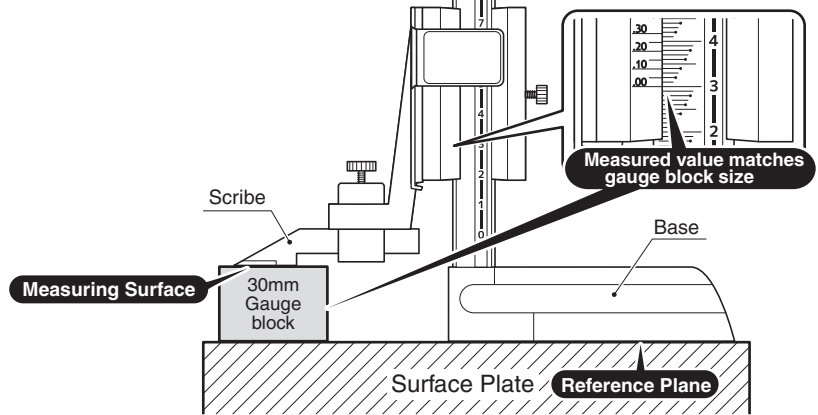
1 Set Scribe to Surface Plate Surface

1. Remove any contamination and clean the surface plate, gauge base, and scribe reference surface.
2. Lower the scribe and bring the reference plane into good contact with the surface plate.
3. Check the indicated value, if reading is zero, then the zero-point setting is complete.



2 Using a Block Gauge

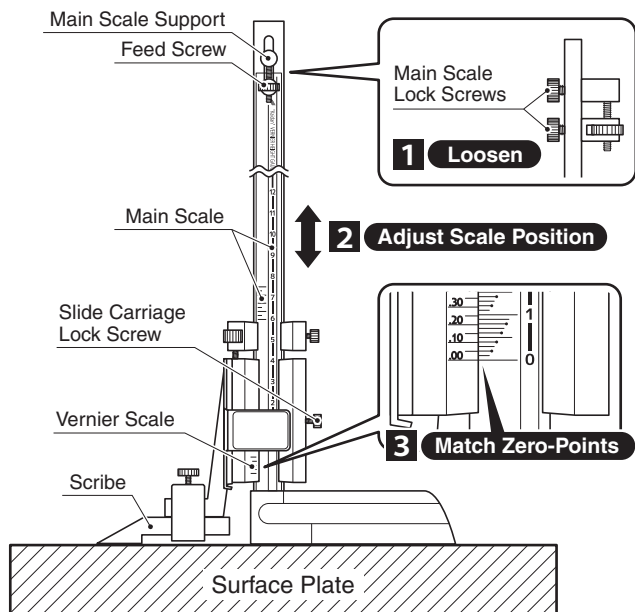
1. Remove any contamination and clean the surface plate, gauge base, gauge block and scribe reference surface.
2. With the gauge block on the surface plate, bring the scribe reference surface into good contact with the gauge block.
3. Check the indicated value, if reading matches the gauge block size, then the zero-point setting is complete.



3 Zero-Point Alignment (Adjusting The Main Scale)

1. Loosen the slide carriage lock screws and insure that the measuring plane of the scribe makes good contact with the surface plate.
2. Loosen both of the main scale lock screws at the rear of the post.
3. Move main scale vertically to perform rough adjustment of the zero points.
4. Tighten the upper lock screw to anchor the scale support.
5. Perform fine adjustment by turning the fine adjust feed screw while monitoring the 0-point on the main and vernier scale.
6. When 0-Points match, tighten the lower main scale lock screw to fix the scale in place.

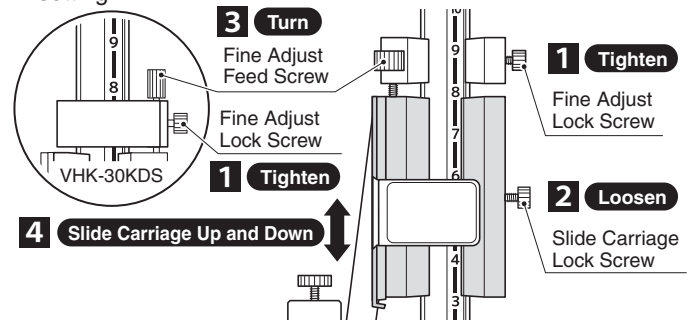
Matching Zero-Points.



SLIDE CARRIAGE OPERATION

1 Fine Adjust Feed Operation

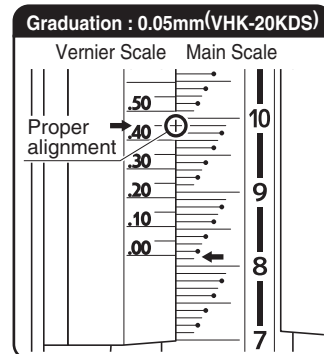
1. Tighten the fine adjust lock screw, and loosen the slide carriage lock screw.
2. Turn the fine adjust feed screw to attain the desired height setting.



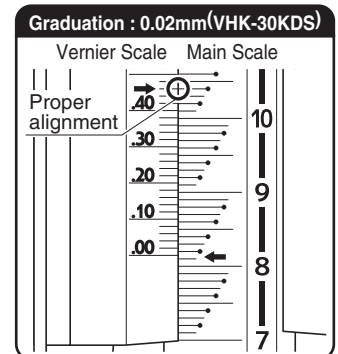
2 How to Read the Scale

As with vernier calipers, the scale is read off the main scale and off the vernier scale at the point where the lines match.

<EXAMPLE>



Graduation : 0.05mm(VHK-20KDS)
Main Scale Reading : 81.00
Vernier Scale Reading : .45
Reading : 81.45 (mm)



Graduation : 0.02mm(VHK-30KDS)
Main Scale Reading : 81.00
Vernier Scale Reading : .46
Reading : 81.46 (mm)

SERVICE

- If height gauge is not working properly, or if you have any questions, please contact distributor or place of purchase.
- Please note, manufacturer is unable to respond to inquires or provide service directly. Please contact distributor or place of purchase.

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