Clamping the Benchmade Barrage 581 in Wicked Edge

Posted by JohannesPetersson - 31 Jan 2013 07:12

Hi there

Does anybody have any pointers on how to clamp the Benchmade Barrage 581 blade in the Wicked Edge? The reason for asking is that the blade has a bit of a weird looking spine (with a drop point) and it also has quite a thick spine close to the handle which tappers of towards the point.

Here's one image of the blade:

wickededgeusa.com/index.php?option=com_k...3&Itemid=63#5597

BR!

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Re: Clamping the Benchmade Barrage 581 in Wicked Edge

Posted by cbwx34 - 31 Jan 2013 08:41

Welcome to the forum!

I just clamped it using the top holes and the 'B' on the ruler... clamped without any problems!

Have fun!

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Re: Clamping the Benchmade Barrage 581 in Wicked Edge

Posted by Geocyclist - 31 Jan 2013 18:41

Curtis,

By your photo the top of the spine (upside down in the photo) is parallel to the base. I started clamping knives this way. Later I moved to trying to get the longest "flat' part of the edge (assuming it has some "flat" or "straight" parts) to be parallel to the base. This means your knife would be rotated slightly clockwise in the photo.

The reason I started the 2nd method is to improve the bevel on the tip end where the belly and rounding of the edge normally starts on most knives.

Is my thinking correct or does it make no difference, the rotation of blade in the vice. Meaning the only impact to how the bevel of the curved section comes out is the position of the blade forward to back, i.e. set at A.5 or B or B.5, etc?

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Re: Clamping the Benchmade Barrage 581 in Wicked Edge

Posted by cbwx34 - 31 Jan 2013 18:53

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That's what I do too... clamp the blade so the main part is parallel. This knife, the spine actually starts to curve about the time it enters the clamp, so it's a bit of compromise. I don't think it makes a big difference... probably depends on the knife.

There's such a variety of knife shapes, especially spines now, that, like you, I use the flat part of the edge more as a guide, and keep it parallel.

Consistency is the key. ☺

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Re: Clamping the Benchmade Barrage 581 in Wicked Edge

Posted by BobNash - 02 Feb 2013 14:14

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cbwx34 wrote:

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edge more as a guide, and keep it parallel.

Consistency is the key.

Agree that consistency is the key!

So just make sure you record how you mount it, although with the sharpie you should be able to find the spot again pretty quickly

For my piece of mind (not straining my memory or my ability to interpret my own notes later) I generally stick to resting the spine on both pins of the depth key unless I can't get to the sweet spot any other way (or of course the blade is too narrow).

Like Curtis says though - I don't think it does matter. As long as you have the knife positioned correctly front to back, the flat (flatter) portion of the blade is going to be along (or approximate) a tangent of the circle so the angle is consistent there and it still tracks down to the tip evenly. There are of course some blade geometries (steel thickness or cutting edge shape) where this doesn't work and we have to sharpen at different tilts or in sections; moving the blade to match another circle to get the hone to track correctly

I say tangent as in Steve Bottorff's book "Sharpening Made Easy" (which deals mainly with guided angle systems but was pre Wicked Edge so doesn't mention it specifically) he indicates that the sweet spot occurs where the distance from the pivot straight up to the cutting edge is equal to the distance from the pivot to the tip. I haven't actually tested those measurement on a variety of edges so can't testify that he is correct but the geometry in my head seemed to back that up since if it were possible to let the stone move through full circle along the plane of the cutting edge, it would trace circle on that plane which would be the base of a cone and the angle at the outside of the circle would be the same all the way around. Man I hope that makes sense

I don't want to hijack the thread but do wonder what your thought are - does that sound correct or match your experience?

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Re: Clamping the Benchmade Barrage 581 in Wicked Edge

Posted by cbwx34 - 02 Feb 2013 15:35

BobNash wrote:

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Hey Bob...

I've heard of it.... I mentioned it before as a way of setting the knife in the F&S model, since it doesn't have a ruler..

(From this thread)

(Although in thinking about it, I guess you could just use the ruler to measure where you set the knife).

It's the recommended way that "The Razor Edge Book of Sharpening" recommends for setting up their clamp (where I got the idea from).

Is that what you're talking about?

Like you, I haven't really messed with it much... but it seems reasonable.

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Re: Clamping the Benchmade Barrage 581 in Wicked Edge

Posted by mark76 - 02 Feb 2013 16:31

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BobNash wrote:

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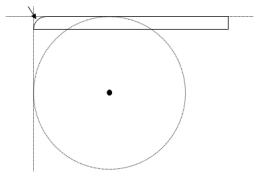
Interesting! I didn't know that book. I think this is indeed is why the author thought this:



So your reasoning surely makes sense. I wrote a blog post on it which you can read here . But I don't think this is the final word on the sweet spot: it only works on knives with a specific geometry.

[Edit: Curtis already referred to this. Well, at least we're consistent.]

Like Bob I don't want to hijack this thread, so if anyone wants more discussion on the sweet spot, please open a topic and I'll react too.

Back to the topic: I've got a 581, too. Very wear-resistant M390. But no match for the WEPS stones. I clamped it at B .25 in the same way Geo and Curtis did. Finished it with 10K Choseras. A bit overkill for a knife like this, but a beautiful mirror edge.

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