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GETS TECHNICAL

AN ADJUSTABLE RIB ALLOWS YOU TO HAVE THE POINT OF IMPACT  
AS YOU WANT IT – AND YOU SHOULD USE IT TO ITS FULL POTENTIAL



# POINT OF

# IMPACT

ADVERTISEMENTS TELL US OF THE POINT OF IMPACT SPECIFICATION OF EACH NEW 'MUST-HAVE' TRAP GUN THAT HITS THE MARKET – WITH MANY OF THE NEW MODELS HAVING AN ADJUSTABLE RIB TO ALLOW POINT OF IMPACT AND LINE OF SIGHT TO BE ADJUSTED TO SUIT THE INDIVIDUAL SHOOTER'S REQUIREMENTS.

This is great, so long as you understand POI and know what it is you actually need for your shooting style. Otherwise it's a case of going with what the hot shots use or being guided by over the counter advice. POI is a tricky subject because it inter-relates with the individual's shooting style and the way you look along the rib. To try and cover every aspect would not make for very interesting reading, so I'm going to limit this column to explaining what POI is and provide, hopefully, enough information for you to work out what will suit you best.

To begin, we need to understand the difference between Line-of-Sight and Point-of-Impact. LOS is simply a straight line drawn between your eye and the target. That's it. No more no

less. POI is where the centre of the shot pattern hits compared to what you see when you look along the rib. If a shotgun had sights, this would be easier to understand and a lot less complicated. Shotguns have a front bead and, most times, a centre bead. The relationship between these two is governed by height of comb and the way you put your head on the stock.

Because we have to have some starting point, I am going to use the classic 'Figure Eight' as being the typical relationship between front sight and mid bead. Figure Eight is when the two beads are stacked one above the other with no rib showing between them. I accept absolutely that some shooters will cram down a bit harder and get the two beads one behind the other, and likewise, some will like a little space between them. That's fine so long as you are aware that this has an effect on your POI reference point. Those who do not use a centre bead are on their

own, as without a repeatable visual reference point it is very difficult to determine if you have the same sight picture every time you mount the gun. This does not mean that you cannot shoot without a centre bead, only that your particular style of shooting relies on other visual feedback.

Assuming that you have a Figure Eight picture, you put the top of the 'eight' onto the aiming point on a pattern sheet and shoot a test pattern. The POI is normally stated as a percentage, typically 70/30 or 60/40. The first number refers to the percentage of the pattern that is above the aiming point and the second number the percentage below. So a 90/10 pattern means that 90% of your shot is above your aiming point with only 10% below it.

That's easy enough, but what percentage high do you need and how do you know what works for you. A trap gun is set up to pattern



higher than the point of aim because a trap target is rising and going away from you. If your POI is 50/50 with the center of the pattern right on the top of the Figure Eight, you have to cover the rising target with the beads to centre it in the pattern. This means that at the critical moment of decision, you momentarily lose sight of the target. It's better to be able to keep the target in view above the rib at all times because you can then instantly see any small changes in flight path that may happen.

With a correctly set up gun you should be able to come onto the target and see the result of the shot without needing to lift your head off the stock. This all makes sense and it's easy to see the advantage of a POI that is higher than your Line of Sight. Remember that LOS is a straight line between your eye and the target and in this case your eye is aligning your bead sights with the target but the shot is striking higher than this to cope with the rising target.

What is harder to work out is how much higher suits your style. POI can range from 50/50 all the way up to 100% high and today some adjustable ribs can give you 120% high. What does that mean?

Well, 100% high would be all of the pattern above the aiming mark with nothing at all below it. 120% high takes that up another notch by leaving a shot free gap above the aiming point and below the shot pattern. In this case, the gap is equal to 20% of the diameter of the shot spread at that distance. These numbers sound very dramatic, but if

you take your effective pattern as being no more than 30 inches, then at 100% high the centre of the pattern is only 15 inches higher than the aiming point and 120% high is only 18 inches above the aiming point. That is a 30" pattern plus 20%, total 36", divided in half to find the centre = 18". You must also remember that this is to the centre of the pattern and below that we have another 18" killing zone that will still catch the target if we overcook it a bit.

**FOR THOSE UNSURE OF WHICH POINT OF IMPACT WOULD WORK BEST FOR THEIR INDIVIDUAL STYLE, TRAP GUNS WITH ADJUSTABLE RIBS ARE THE WAY TO GO. YOU CAN THEN PRACTICE DIFFERENT STYLES AND IMPACT SETTINGS UNTIL YOU FIND THE ONE THAT WORKS FOR YOU.**

Before you decide on how high you want your POI, you need to consider how you approach the target. There are many different ways and we don't always shoot the same way. If your approach is to use a hold point close to the trap roof and follow the target up, letting the shot go as your beads come onto the leading edge, you will probably be best suited with no more than 70/30. If you use a very fast swing then 60/40 may suit you better. You are moving with the target and, because it had a head start on you, your gun movement is a little faster than the speed of the target. This means that you will have some degree of follow through after you

take the shot and this takes care of the fact that the target is rising and you need to shoot above it.

High hold shooters may let the target go past the rib before closing down on it but as their gun movement is less, there is less follow through and a higher 70/30 to 80/20 POI takes care of the climbing target. Alternatively, if you are a high hold shooter who lets the target come up to the gun, but just makes a horizontal movement onto the line, firing as the target passes

through the rib, you will want the 100% or even 120% POI. You have tracked the target with your off eye and moved the gun over onto the line of the target before it reaches the height of your rib. You have only horizontal movement and zero vertical follow through. If this sounds a little scary, you should remember that you have pattern width to cover miscues. You don't have to centre the target within an inch every shot, although a set up that allows you to do so the majority of the time is clearly the way to go.

For those unsure of which Point of Impact would work best for their individual style, trap guns with adjustable ribs are the way to go.

You can then practice different styles and impact settings until you find the one that works for you. With a fixed rib it's a case of adopting your style and sight picture to where the gun shoots, but with an adjustable rib you set the gun to your style and that has to be the shortest route to success. Many find an adjustable rib intimidating and worry that they will somehow mess it up. This leads to a fear of touching the adjustment at all – and that means that you are not getting the full benefit of the feature.

All ribs have a reference point and a scale to show the amount the rib has been moved. Basic rules are that lifting the front of the rib lowers the POI while lowering the front of the rib raises the POI. Always record the changes you make so you can easily return to a previous setting and always check the results of your rib changes by pattern testing. Become familiar with how your rib works so that you are confident to make a small adjustment during a shoot if you recognise that you are taking either tops or bottoms off targets.

If you know your gun, you can quickly make an adjustment to put you back working in the centre of the pattern. Remember that you have the shot spread working for you and it is very unlikely that adjusting the rib will cause you to actually miss a target. You would need to move the rib a long way before you took the entire pattern off the target. An adjustable rib allows you to have the Point of Impact as you want it – and you should use it to its full potential. ■

