

## LEARN MORE ABOUT LOADING JUST TWO LOBES

These instructions are intended to provide guidelines for taking advantage of two-lobe loading with the Totem Cam.

As explained in the “Instructions for Use”, two lobe loading is not suitable for protecting against falls, although it can help to support body weight in some aid climbing situations. Explore the usage limits while you are still on the ground.

There are many placements in which loading just two lobes can be advantageous. We have divided these different placements into two categories: two-lobe and three-lobe placements. Two-lobe loading can sometimes be a good option, even though all four lobes are contacting the rock. In these cases, the explanations given for three-lobe placements apply.

### TWO-LOBE PLACEMENTS

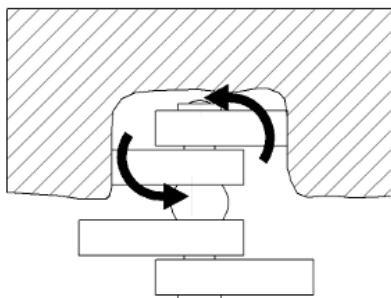


Figure 1

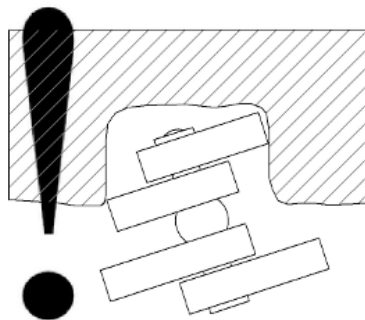


Figure 2

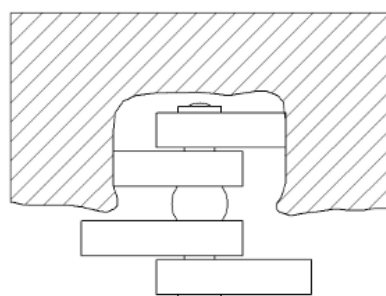


Figure 3

Pick up a Totem Cam and examine it. As in almost all other camming devices, you can see that the two lobes you would attempt to place in the crack are not on the same plane. When you load those lobes, the forces applied by the rock to the lobes are not opposing each other, and the cam head will therefore tend to rotate (see figure 1). In rocks with an easy grip (e.g. granite), this tendency may be counteracted by the lobe/rock friction. In any case, you must deal very carefully with such placements. Cam head rotation would cause placement failure instantly (see figure 2).

To attempt to avoid cam head rotation, you should look for a placement where the crack is slightly thinner in the outer part than in the inner part (see figure 3).

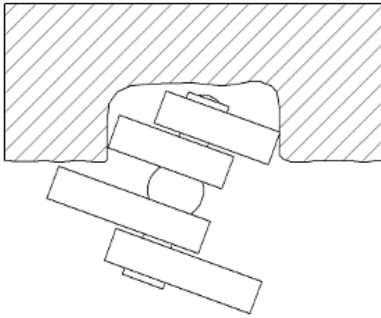


Figure 4

As another solution, try counter-rotating the cam head a little before placing it (see figure 4). In this way, the rock contact points of the lobes will be (almost) opposed and rotation tendency will be minimized.

### THREE-LOBE PLACEMENTS

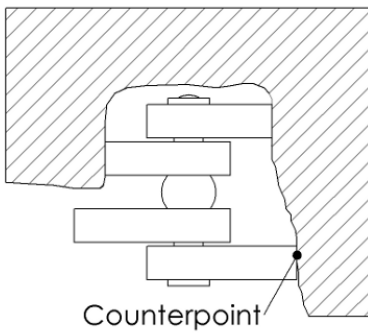


Figure 5

Much more secure placements can be obtained with three lobes. The goal is to avoid the rotation tendency by a counterpoint obtained with the outer lobe (see figure 5). If the lobes you are going to load are well placed and the outer lobe of the remaining two is contacting the rock, you will find the placement secure. Be careful to choose the right positioning of the cam (you can place it with outer lobes to the right or to the left). If you choose the wrong positioning you cam would be working as two lobes on a scary placement (see figure 6).

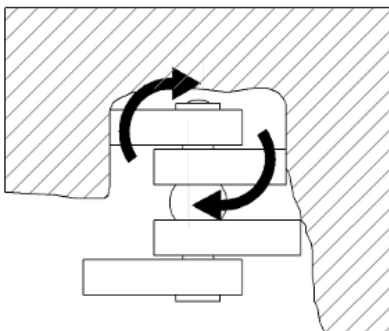


Figure 6

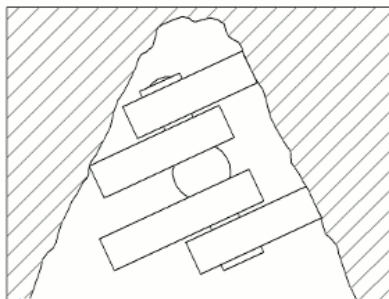


Figure 7

In very flared cracks, you can try to place the cam with the axle parallel to one of the rock faces and both outer lobes contacting the rock. Then release the trigger to obtain rock contact on one of the inner lobes. You should look for an acceptable contact point for this third lobe (see figure 7).