

22 Designs Axl - A Closer Look

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We tested a Beta Test version of the binding, a preproduction guinea-pig, that's subject to minor revision. Unlike most manufacturers who develop products and distribute them to a select group of testers, this test program uses customers who pay full price for the untested product and become the "real world" test team. In return for paying up front, and providing honest feedback on the product's shortcomings, these consumer-testers receive a free upgrade to the finished product. The beauty of this program is that the testers have a stake in the outcome since they paid to join, and they want their money's worth. As a result of this program, the final version of the Hammerhead has remained virtually unchanged for nine years, a feat no other telemark binding can claim.

Initial Axl Impressions:

Click Image to Zoom{rokzoom album=|Axl Binding| title=|New Hammerhead Axl Pivot|images/stories/axl_review/axl_pivot.jpg{/rokzoom}}

The single, powerful spring that sticks out in front of the Hammerhead and provides its namesake appearance is replaced with two flat-wire wound springs behind the toe on the Axl. However, the same dual underfoot cables with an adjustable pivot point are retained, yielding an equivalent feel and transfer of power through the ball of your foot while telemarking. A key part of this sensation is where the spring housing contacts the sole of your boot to impart the power of the springs-specifically at or behind the ball of foot, or bellows flex point (depending on foot size). As a result, pressure is exactly where you want it, increasing the sense of power driven through the rear foot.

At the recent Backcountry Magazine annual gear test, we compared Axl and Hammerhead side by side on the same pair of skis (mounted right and left respectively). Everyone agreed that the respective settings are equivalent as follows:

Axl#2 ~ HH#3

Axl#3 ~ HH#4

Axl#4 ~ HH#5

At the lower settings, Axl felt a tad more powerful, at the higher settings, the difference, if any, was harder to detect.

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Although the dual springs deliver plenty of power, the retaining swages on the cable are excessively long, making it impossible for the heel peg to be positioned close enough to the toe plate for feet smaller than mondo size 27. We have been told this will be changed for the final version to something shorter and cleaner. A smaller version will be available for smaller boots with the break point somewhere around mondo 25.

Adjusting the pivot location with Axl is much easier than with Hammerhead. Simply pull out a single pin and move it fore or aft. A spring-loaded tab prevents it from falling out. Best of all, moving the pin can be done with your fingers only since the locking tab is easily depressed with just a fingernail. Unfortunately the power pin doesn't appear to be strong enough to withstand long term abuse since a few of the limited beta testers have already reported bending issues.

Switching between turning and earning modes is accomplished by using a ski pole to lever an L-shaped bar forward or back inside a plastic cup in front of the toe. This mechanism seems a bit resistant to movement, potentially causing damage to ski pole tips, and compared to competitor's switches, Axl's mode switch is a bit finicky.

Switching to tour mode, in particular, requires you to move the lever back a bit until the pole tip can fully seat in the bucket, then pulling back a second time to fully seat it to the rear. Returning to downhill mode is a matter of levering your pole off the front of the toe bar to move the lever forward.

There is one report of icing preventing mode changes, but even when subjected to icing conditions it never happened to Backcountry testers. Skepticism remains, however, that the mode switch might ice up somewhere along its length, preventing mode changes without chipping ice away.

In touring mode Axl can deliver a healthy 50'-plus range of free- pivot motion. However, when conditions are prime for icing-warm temps with cold snow, or sticky fresh snow-the snow can build up in more than one place.

Most problematic is snow packing under the front of the toe. This creates a bumper of ice that reduces the range of motion by as much as half. It starts by freezing to the metal heads of the two front mounting screws. It should also be noted that this same icing condition is possible, when the conditions are ripe, even on a Switchback, but symptoms are not as severe. With Axl, the range of motion can be reduced enough that your ski tips are pushed down creating excessive drag when breaking trail in deep snow. Then, if you want to make a snap-pivot turn, your ski tips can't swing high enough to clear the snow without lifting your leg to swing the ski around. It's fairly easy to chip the ice away with the tip of your ski pole, but the problem could be improved.

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Click Image to Zoom{rokzoom album=|Axl Binding| title=|Snow Build-Up Under Toe Piece 2|}images/stories/axl_review/toe_jam2.jpg{/rokzoom}

It is also possible for snow to glom onto the underside of the spring housing, creating a large chunk of ice that prevents your foot from resting flat while turning. A simple check at the top of a climb and a strategic whack to knock the ice off cures that problem.

There appear to be several tolerance and finish issues with the beta version of the Axl. The rear pin that holds the toeplate together at the rear is welded, and crudely finished, causing the toe plate to rub against the baseplate on one side or the other. More noticeable, the free pivot has a fair amount of resistance when you move it with your hand, even pinching against the molded plastic baseplate piece. You won't notice it through your foot, but this extra resistance-even without ice buildup to reduce the range of motion-is enough to drive your ski tips down when breaking trail. There just needs to be a bit more space between the circumference of the axle and the plastic baseplate.

The Axl retains the Hammerhead's six-hole mounting pattern, except Axl's pin line is actually 5mm back, so you need to move the binding 5mm forward for pin line to be the same as for a Hammerhead. I didn't bother switching and couldn't tell the difference.

Evidence suggests that the standard four-hole pattern isn't quite up to the task of holding a binding securely to a ski while telemarking. The six-hole pattern appears more durable, and, for most telemarkers, up to the task.

Several people who mounted without a jig had issues with screw heads protruding above the top surface of the plastic baseplate that prevented the mode switch from moving freely. Since not everyone has access to a Hammerhead mounting jig, the dimensions of the baseplate ought to be adjusted to accommodate a less than perfect mounting job.

Axl isn't the lightest binding out there, but in the 75mm realm it is unquestionably the most powerful with a free pivot. Less weight would certainly be desirable.

There are bound to be a few other problems with Axl that come to light in what remains of this winter. The good news that 22 Designs decided to follow in the footsteps of the Hammerhead's originator, Russell Rainey, and deliver Axl to customers using a Beta Test program.

The proof is in the product. Axl delivers Hammerhead power with a free pivot. There are a few kinks in the design, just as there were with the beta version Hammerhead. With luck, the beta test program will yield the type of feedback necessary to improve the design to survive long-term, real world abuse, and Axl will become the new standard for telemark performance inbounds and out.