THE PIVOTAL SKI BINDING PLATE

A responsive ski binding to reduce the instance of ACL injuries in alpine skiers.

**Features**
- Novel ski binding plate
- Unique constant load absorbing mechanism
- Adjustable vertical displacement monitor detects injurious loads
- Dual pivot at toe end allows for lateral motion of the heel

**Benefits**
- Reduced risk of ACL injury
- Reduced likelihood of inadvertent release
- Only activated when injury is imminent

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**A novel “smart” binding plate that responds to a skier’s weight transfer.**

Detected when injury is imminent, then reacts.

The Pivotal Ski Binding Plate protects skiers from anterior cruciate ligament (ACL) injuries caused by “phantom foot” and boot-induced anterior drawer.

The plate utilizes an adjustable spring-cam mechanism that acts as a vertical displacement moderator. This moderator can absorb applied forces leading to boot induced anterior drawer injuries, and sense when the skier is in a compromised position, activation the phantom foot injury avoidance system, releasing the heel. The binding may then rotate about the toe, reducing injurious loads without need for release. Because the foot does not remain in a fixed position, less injury-inducing twisting of the knee can occur. This mechanism can be reversed, so that it can be used on either foot. The Pivotal Ski Binding Plate helps to prevent injuries without fear of inadvertent release, as well.

**Patent Pending**