



SpinTarp User Notes

By BOZEMAN MOUNTAIN WORKS

Dear BackpackingLight.com Customer,

Thank you for your purchase of a SpinTarp. Herein you will find some useful guidelines and tips to help maximize the performance of your SpinTarp and to help you understand its limitations.

SpinTarps are designed for the advanced lightweight backpacker. Where traditional silicone-impregnated "parachute" nylons (1.3 oz/yd² to 1.8 oz/yd²) are durable enough for beginners, we cannot recommend the use of SpinTarps (made with 0.9 oz/yd² silicone-impregnated textiles) for those who do not have previous experience with ultralight backpacking gear. Following is a summary of the durability limitations of SpinTarps and how you can deal with them.

SpinTarps are made with a very light fabric that is less abrasion resistant, has a lower seam strength, and is more prone to tensile failure than heavier silicone-impregnated nylons.

Puncture and Abrasion Resistance. Under no circumstance should SpinTarps serve double duty as a ground sheet for your sleep system. The fabric is not resistant to punctures and use as a ground cloth will compromise its waterproofness over time.

Seam Strength and Tensile Failure. Because of the lower denier density of this fabric, SpinTarp seams are not as strong as seams from heavier nonwoven textiles. We have made every effort to maximize seam strength by using the strongest possible construction methods, including reinforcing patches, properly felled seams, and low-stretch, large-diameter synthetic threads. However, you must realize that the amount you can stretch a seam (i.e., the force you apply to the seam) is somewhat less than that which can be applied to similarly-constructed seams in 1.4-1.8 oz/yd² silnylon. Excessive seam stretching is not likely to result in seam failure due to our construction methods. More likely, it will result in failure of the fabric adjacent to the seam, and along a direction parallel to the seam force – a type of failure that is not covered under the SpinTarp warranty. Minimize tensile forces placed on fabric adjacent to seams by maximizing the number of stakes and guylines you are using to pitch the tarp, which results in a better distribution of forces throughout the tarp fabric. **See the photo below for more notes about this!**

Wind Loading. SpinTarps were designed for the ultralight fringe who wants to sacrifice weight as much as possible and have the skill and common sense to use their gear appropriately. Tarp camping in high winds, and especially, above the tree line in the mountains, is a risky proposition for those who are not knowledgeable about properly setting and pre-loading tarps for winds. With a SpinTarp, an even greater level of skill and attention is required because of the need to minimize seam loading and to evenly distribute panel tension in the tarp. We have successfully used SpinTarps above the tree line – in the mountains – in windy conditions.

More importantly, we have discovered their limitations as well, and have experienced fabric failure in response to high winds. We tested SpinTarps at the very exposed and aptly named Hurricane Pass in Wyoming's Teton Range, and at the similarly exposed Flathead Pass, the famous windblown col of Montana's Bridger Mountain Range. Fabric failure occurred at wind gusts of approximately 20-30 mph for tarps that were improperly pitched (poor distribution of panel tension) and at approximately 40-50 mph for tarps pitched low the ground with excellent panel stress and seam distribution. Failure nearly always occurred in the fabric adjacent, and parallel to, perimeter seams along which too much tension was distributed (by stretching that seam section too tightly between guy-out points). Below the tree line, winds of this magnitude are seldom found in the backcountry, and often, enough wind breaks can be found at higher altitudes (trees, cliffs, boulders, etc.) to dissipate the energy from gusts as strong as these. So, please pay careful attention to where you are pitching your tarp, how you are distributing panel forces, and how much tension you are pulling across seams.



This photograph shows a properly pitched SpinTarp (X-Cat Model). Note the complete absence of wrinkles. This pitch is easily accomplished by pitching only the ridgeline and the four corners (requiring only six stakes and recommended only for calm conditions), or by securing each tie-out point (a total of twelve including the ridgeline) with a guylines and/or stake. The latter method is recommended in windy conditions, because maximizing the use of tent stakes and guylines results in the best distribution of tensile forces (increased in response to wind) across the fabric, and especially, along the fabric adjacent to edge and ridge seams in tension.

Seam-Sealing. To maximize seam strength, you can seal ridgeline, edge, poncho hood, and guylines tie-out seams and reinforcement area stitching. Careful seam sealing (use SilNet from McNett, slightly thinned and well mixed with a few drops of mineral spirits at 80 degrees F, for best results) requires a lot of time. Do not use an excessive amount of seal. The primary goal of sealing the seams is not to increase waterproofness, but to maximize seam strength. It's a pain to do. Is it worth it? It might be for you, it might not be for others. It's your call!

Please note that SpinTarp Warranty and other information can be found at:

<http://www.backpackinglight.com/cgi-bin/backpackinglight/00157.html>

And, a discussion of advanced tarp camping techniques, including the need to properly distribute panel tension, can be found here (subscription required):

<http://www.backpackinglight.com/cgi-bin/backpackinglight/00150.html>

If you keep these limitations in mind and understand that your SpinTarp is a specialty item designed for advanced backpackers wanting to push the limits of lightweight gear, your SpinTarp will sufficiently meet your needs, and we wish you the best of backcountry enjoyment while using some of the lightest shelters available anywhere.

Godspeed and Go Light!
Ryan Jordan