

# LOWEST TIRE PRESSURE

BLIN-05 Rev05

**Note:** The images in this BLIN are of the original Staun beadlock. It had white Sidewalls and orange Tread. The newer, made in the USA Coyotes have nine-time stronger yellow Tread and twice as strong black Sidewalls.

**Problem:** How low of a tire pressure can I run without damaging the Coyote Dual, Internal, Pneumatic, Boltless Beadlock?

**Discussion:** Although the Coyote Dual, Internal, Pneumatic Boltless, Beadlock can be used as a “limp flat” for a mile or so, you cannot drive on a flat or “very low” tire pressure for great distances. Too low a tire pressure or a flat tire brings the outside of the Case Tread overlap sewing into contact with the inside of the tire tread. This wears away the tread overlap sewing as shown. These pictures are what beadlock failure looks like when you run too far on too low a tire pressure or a flat tire.

Also be aware that the sewing methods in the newer yellow and black Coyote beadlocks will wear away the butyl rubber, inner tire lining. This is evidenced by soft, black, garbanzo-bean-sized balls. Remove these for reassembly.

And be aware that a racer trick is to grease the overlap sewing with a high-temp grease of some sort.

The lowest tire pressure that you can run is determined by a combination of the tire’s age, condition, temperature, the vehicle’s weight and how you drive the terrain. The next paragraph describes how to determine the lowest recommended pressure.

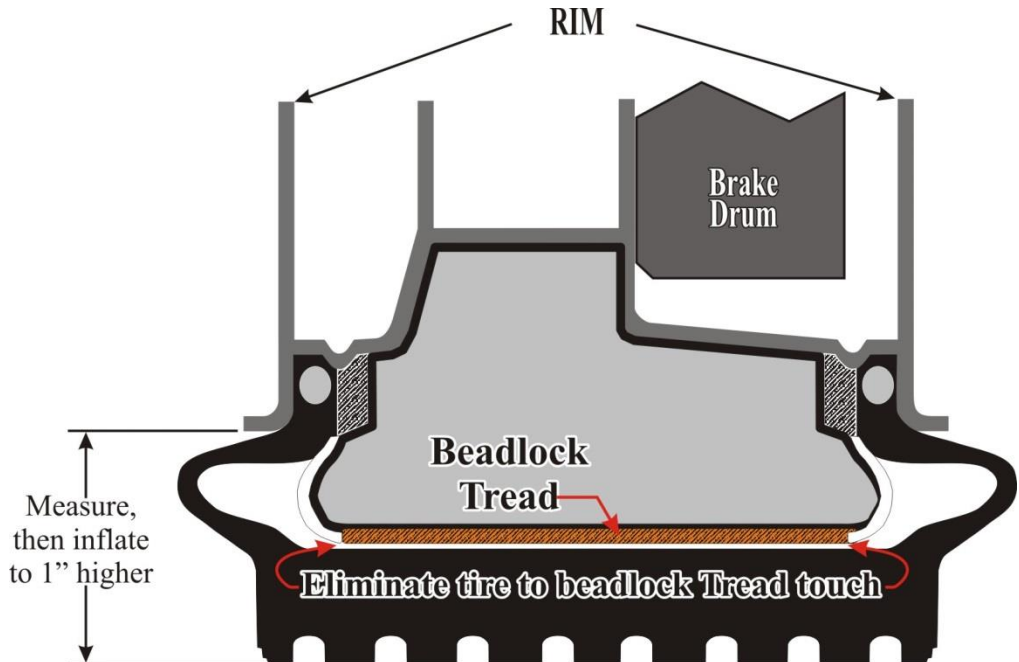


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**Solution:** With the beadlocks installed and inflated on your fully loaded vehicle, on flat ground, completely deflate both front and both rear tires (again, beadlocks fully inflated). Measure the distance from the ground to the bottom of the rim. This assumes that the vehicle is heavy enough to completely compress the tire and it is touching the inflated beadlock. If the tire is not fully compressed, then this method can still be used, it will just produce a little more conservative tread to beadlock Tread to inside of tire tread clearance.

Your objective is to ensure that the beadlock Tread never touches or rubs the inside of the tire tread. Measure the height of the rim from the ground and then add air until the bottom of the rim is one inch higher than with the tire flat. Do this for all four tires. Now measure each one inch elevated tires' pressure. This is the lowest tire pressure you can run.

However, this assumes that the vehicle will be driven in such a manner so as not to produce severe bumps as in climbing or descending steep hills or whoop-de-dos.



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