Quick Guide to ATV Tire Ball Installation

Video installation instructions may be accessed at www.tireballs.com

(Note: some important steps and safety considerations are highlighted in red. Please pay particular attention to these steps and cautions)

- 1) Rim Preparation.
 Inspect and debur any sharp gouges or weld spatter that may be present on the interior surface of the rim.
- 2) Lubricate the inside of the tire carcass and the surface of each Tire Ball. Use either aerosol or liquid silicone oil. We find that the pure liquid silicone oil (included in the installation kit) lasts longer and offers the best lubrication.



3) Install quick clamps onto the tire side-wall so that they project into the interior of the tire carcass to use as a backstop for the balls, two clamps work the best.

Insert partially inflated Tire BallsTM into the tire carcass pressing them against the clamps. Make sure that the inflation inserts are accessible and that all the inserts are facing the same direction.



4) Install Tire Balls[™] into the tire carcass in a partially inflated state. Typically, the number required will be 12-14 Tire Balls[™] in either a front or rear ATV tire. Contact us at 877-847-3225 for exact recommendations for your particular brand tire and wheel.



5) Bring each ball up to the final pressure gradually, alternating between every other ball, much as you would torque a cylinder head, using the inflation regulator and pressure gauge. The intent is to bring the pressure up gradually so that all the balls are the same size and pressure, to accomplish this you must inflate each ball for 3 seconds then move to the next until you reach the desired final pressure. This procedure may require several rotations of inflating each ball. The typical final pressure is 5 psi.





6) Lubricate the rim with the water-based tire bead lube as well as the tire beads.





7) After checking and aligning for tire direction and wheel direction, force the tire over the rim flange that is closest to the recessed center of the rim. For bead lock rims force the tire over the bead lock flange.



- 8) Force the tire onto the rim as far as possible so that the remaining bead is as close to the rim flange as possible.
- 9) If you are using bead lock wheels follow step 10a.

Mounting the remaining tire bead over the rim flange will require the use of a Bead Hold Down Clamp (Bessey Clamp and UHMW low friction shoe). This clamp and shoe hold the tire bead down in the recessed portion of the rim. Smearing some bead lube under the clamps makes the installation easier.





Once the Bessey clamp is in place, long tire irons can be used to force the remainder of the tire bead over the rim.





10a) For Bead-Lock Wheels - Use three long studs screwed into equally spaced holes around the rim. Install the bead lock ring and pull the ring down gradually until the bolts supplied with the rim can be started by hand. Tighten the bolts and replace the long studs with the remaining bolts supplied with the rim.



10) After removing the Bead Hold Down Clamps, apply additional bead lube onto the exposed tire bead and rim. Laying the wheel flat on the ground, attach an inflation hose to the valve stem (core removed) and inflate to seat the tire beads onto the rim.





For your own personal safety, never use an air chuck applied to the valve stem, use a remote inflator as shown.

Never exceed either the tire or rim manufacturer's maximum pressure rating when seating the beads. If you are seating a bead lock wheel make sure you can visually see the side that needs seating.

Exhaust all internal pressure before moving the wheel; do not move the wheel before exhausting the pressure so that the balls do not come out of alignment.

If when exhausting the air, the flow of air suddenly stops, there may be a Tire BallTM blocking the valve stem hole. If you suspect this has happened force a small diameter rod through the valve stem opening to push the Tire BallTM aside and allow all of the internal pressure to be released.

12) Remove the remote inflator and install the valve core and cap. The tire is now ready for mounting on the vehicle.

If you have any questions regarding installation contact our toll free customer service department at 1-877-TIREBAL or email us at info@tireballs.com.

