### TRAILREADY CONVERTED BEADLOCK WHEEL INSTALLATION PROCEDURES

# WARNING: Bead lock Wheels are intended for off-road use.

Check your local statutes to see if prohibited for Hiway Use.

Parts included: example is 16" wheel

- 1) Wheel
- 2) Aluminum Clamp Ring
- 3) 20 ea. 1-1/4" 5/16" grade 8 bolts
- 4) 20 ea. Plated 5/16" Washers
- 5) 20 ea. Serrated flange nuts
- 6) 4 ea. silver starter bolts
- 7) 1 ea. Valve stem

#### **Tools Required:**

- 1)  $\frac{1}{2}$ " socket, ratchet, and open end wrench
- 2) Valve core tool.
- 3) Two dull pry bars
- 4) Soap
- 5) Anti-seize

#### IMPORTANT NOTE: BEFORE YOU MOUNT YOUR TIRES TO THESE WHEELS

#### CHECK FIT THE WHEELS TO YOUR VEHICLE AND CHECK FOR PROPER FIT. CHECK FOR INTERFERANCE WITH BRAKE CALIPERS. CHECK FOR INTERFERANCE WITH BRAKE RETAINER CLIPS AT THE WHEEL STUD AND BALANCE WEIGHTS ON THE DRUMS.

#### Step 1 Installing the Valve Stem

Remove the two nuts, steel washer and one rubber gasket from the valve stem. Install stem in wheel from the outside (finished side) of the wheel. Push on rubber gasket followed by steel washer with the domed side away from the gasket. Thread on one nut and tighten until rubber gaskets begin to bulge. DO NOT OVER TIGHTEN. Thread on the second nut and tighten against the first without over tightening the first. Back out and reinstall the valve core to insure it is tight.

#### Step 2 Installing the inside tire bead

Set wheel face up on a solid surface. Use a soapy solution to lubricate the back bead of the tire. Push the tire onto the rim so that half of the bead is pushed into the dropped well of the center of the rim. Apply steady pressure and work your way around the bead until the tire drops onto the wheel. If it is necessary to use tools to help the tire onto the rim, take care not to damage the tire.

Step 3. Installing the outside tire bead.

Now set the tire/wheel face up on a 5 gallon buck. Use NO soap for this step. Center the bead of the tire over the stepped bead lock edge. On most applications the tire will fit easily over the step. A couple of medium size flat head screw drivers will assist if the bead is tight.

#### Step 4. Installing the Clamp Ring.

With the pocketed holes facing away from the tire, index the valve stem relief or TR logo to the valve stem and center all the clamp holes over the wheel bolt flange holes. Drop in the 4 longer starter bolts in opposing locations around the clamp and thread on the provided nuts. Sequentially tighten down the four bolts until you can install the remaining nuts the 1-1/4" bolts. Remove the starter bolts and using anti-seize, replace with 4 ea. 1-1/4" bolts. Using a cross hatch pattern, tighten all bolts, in steps a 5-7 ft.lbs. at a time, working your way around the clamp until 20 ft.lbs. is achieved. Depending on the thickness of the bead on your tire, you should have no gap or an even gap between the wheel bolt flange and the back of the clamp ring \*\*

It is normal for the clamp to distort into a slight cone shape when properly tightened. DO NOT EXCEED 22 FT.LBS ON THE BEADLOCK BOLTS. DO NOT ALLOW THE END OF THE STARTER BOLTS OR BEADLOCK BOLTS TO DRIVE INTO THE WHEEL. THIS WILL VOID YOUR WARRANTY, AND CAN DAMAGE THE WHEEL \*\* If the thickness of the tire bead, at 22 lbs ft., leaves a gap between the rim and ring, you will have an improper assembly, the result of which is potentially going to fatigue the bolts over a period of time and cause them to break. We offer 3/16" spacers to correct this problem.

Step 5. Inflate the tire to the desired air pressure. Do not exceed the tire manufacturers recommended air pressure.

CAUTION: UNDER NO CIRCUMSTANCES IS THE TIRE TO BE INFLATED WHEN THE CLAMP RING IS NOT PROPERLY SECURED. ALWAYS REMOVE

## VALVE STEM CORE BEFORE REMOVING CLAMP RING.

#### Operation and Maintenance

#### AFTER YOU MOUNT YOUR TIRES PER THE INSTRUCTIONS PROVIDED MAKE SURE YOUR WHEELS ARE PROPERLY TORQUED.

Use the dry wheel lug torque values specified in the chart below. Since the vehicle may have been originally equipped with steel or forged wheels, the original specs may not be correct for aftermarket wheels. Since the thickness of an alloy wheel can differ from Original Equipment wheels, also verify that the lug nuts or bolts will engage the threads. Refer to the chart below to determine the number of turns or the depth of engagement typical for your stud or bolt size.

Lug Stud Size	Typical Torque Range Ft/Lbs	Minimum Number of Turns of Hardware Engagement
12 x 1.5 mm	70 - 80	6.5
12 x 1.25 mm	70 - 80	8
14 x 1.5 mm	85 - 90	7.5
14 x 1.25 mm	85 - 90	9
7/16 in.	70 - 80	9
1/2 in.	75 - 85	8
9/16 in.	100-110	8

Trailready Beadlock wheels are designed for extreme off hiway use. When properly mounted and maintained, they will provide years of trouble free use in the most extreme offhighway environment. It is recommended that the operator visually check the beadlock bolts after each use. In any beadlock system, torque from the loads placed on the tire is transferred through the beadlock clamp to the bolts and can cause even grade 8 bolts to break from time to time. When changing tires, do not reuse existing hardware.

NEVER ADJUST TORQUE ON BEADLOCK BOLTS WHILE TIRE IS INFLATED. <u>NEVER</u> <u>RE-TORQUE BOLTS AFTER INITIAL</u> <u>INSTALLATION.</u> IF BOLTS COME LOSE, REMOVE THE VALVE CORE AND REPEAT STEP 4 WITH NEW BOLTS.

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