M-1021-RA1 and F15RB
Off-Road Bead Lock Ring Installation

PRIOR TO INSTALLATION READ THESE INSTRUCTION COMPETELY
For questions, Call the FORD PERFORMANCE Techline 1-800-367-3788

Please visit https://www.performanceparts.ford.com for warranty information

Warning: **Mounting the tire in the bead-lock position is for off-road use only. On-road driving with the tires in the bead-lock position is not permitted.**

Warning: **Ford Performance only recommends using bead-lock rings from Ford Performance in conjunction with the OEM tire. Any other combination using this wheel could result in air loss or tire failure.**

STEP 1:

Existing Wheel and Tire: When installing bead-lock rings on factory OEM bead-lock compatible wheels with the existing tires, dismount the wheel and tire from the vehicle and use a T45 Torx wrench to remove the decorative beauty ring from the wheel. While working on a flat, level surface (or on a tire machine if available), fully deflate the tire by removing valve stem core and then break the outer bead of tire from the wheel and pull it over outside of outer wheel flange. Go to STEP 2.

New Ford Performance wheels and tires: Place a liberal amount of tire soap on the outer flange and force the inner bead over the flange onto the wheel. Use a rocking motion until entire bead has cleared the outer flange. Tire soap can be purchased at your local auto parts store or online.
We recommend Myers #8 MTS Europaste or equivalent. (See Pic 1.1)

Pic 1.1 – Force the inner tire bead over wheel flange

STEP 2: Place the outer bead of the tire against the outer wheel flange. Ensure the tire fits within the flange provided. (see Pic 2.1)

Pic 2.1 – Outer tire bead fits on wheel flange

STEP 3: Apply a liberal amount of tire soap onto the outside face of the tire bead. This will greatly aid in ease of assembling the bead lock ring and is essential to even seating of the tire. (See Pic 3.1)

Pic 3.1 – Apply a liberal amount of tire soap to the entire bead.

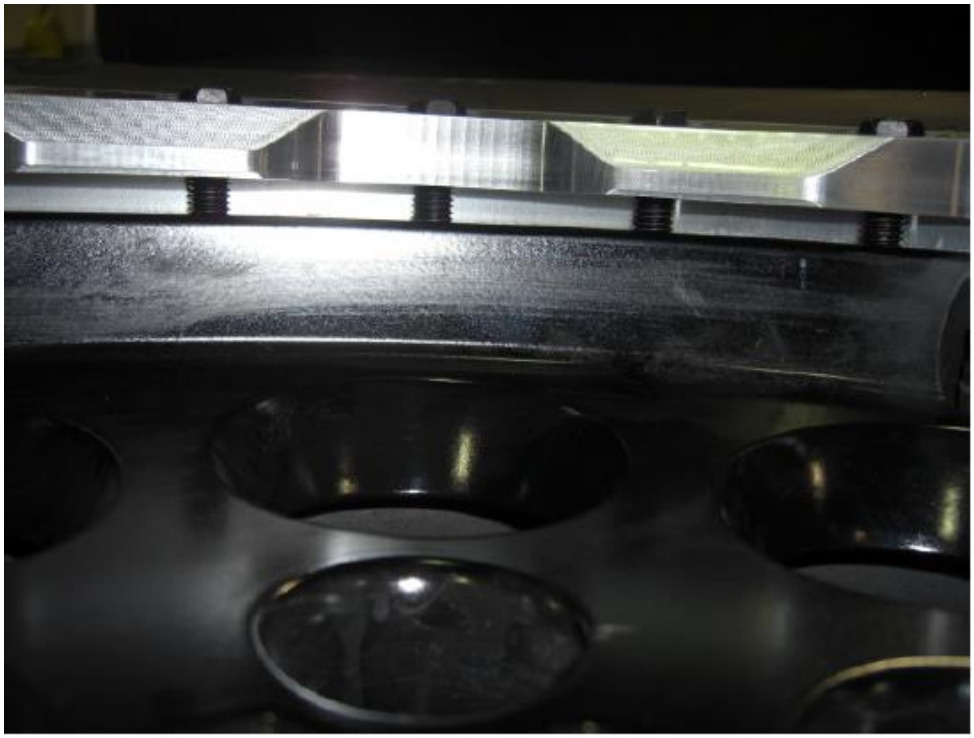
STEP 4: Press the bead-lock ring firmly against the tire. Make sure the cut-out for the valve stem is positioned properly. The ring will wedge itself into the tire. Take four (4) of the provided bolts and hand tighten them at the 12, 3, 6, and 9 o'clock positions (90° spacing). Once they are threaded in, tighten them an additional one full turn by hand with a 13 mm socket or nut driver. (See Pics 4.1 & 4.2)

Pic 4.1 – Hand thread 4 bolts at the corners.

Pic 4.2 – Tighten each bolt at least 1 full turn with a socket wrench

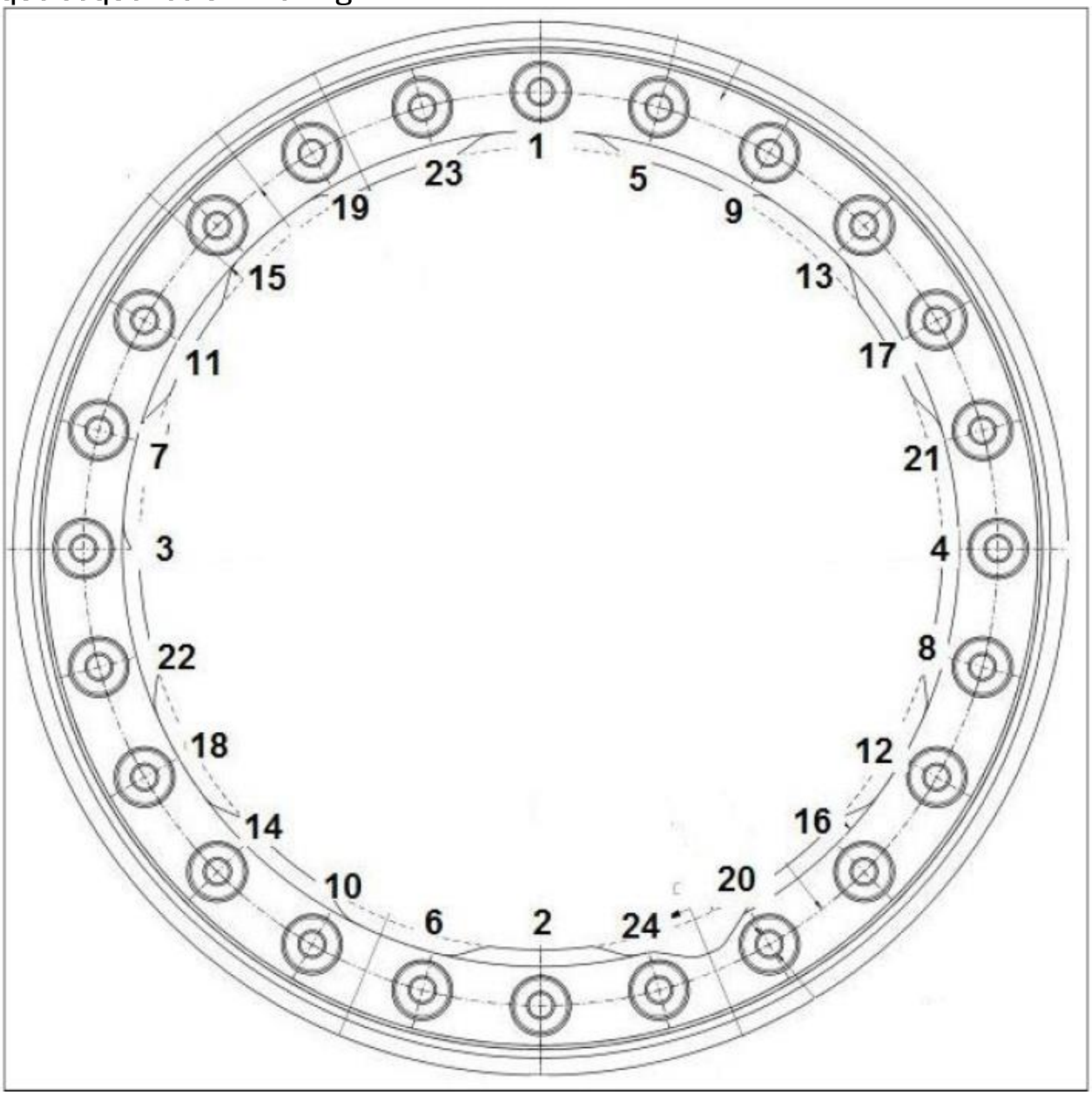
STEP 5: Hand-tighten all remaining bolts on the bead lock ring. Ensure the gap between the ring and wheel is uniform around the entire circumference. If it is not, tighten the side that has a larger gap by hand with a socket or nut driver until the gap is uniform. (See Pics 5.1 & 5.2)

Pic 5.1 – Hand thread in all remaining bolts.



Pic 5.2 – Ensure a uniform gap around entire ring.

STEP 6: Apply the provided torque sequence template on the wheel. The sequence can start at any bolt. (See Pics 6.1 & 6.2). For better clarity, a dry erase marker may be used to write the torque sequence on the ring.

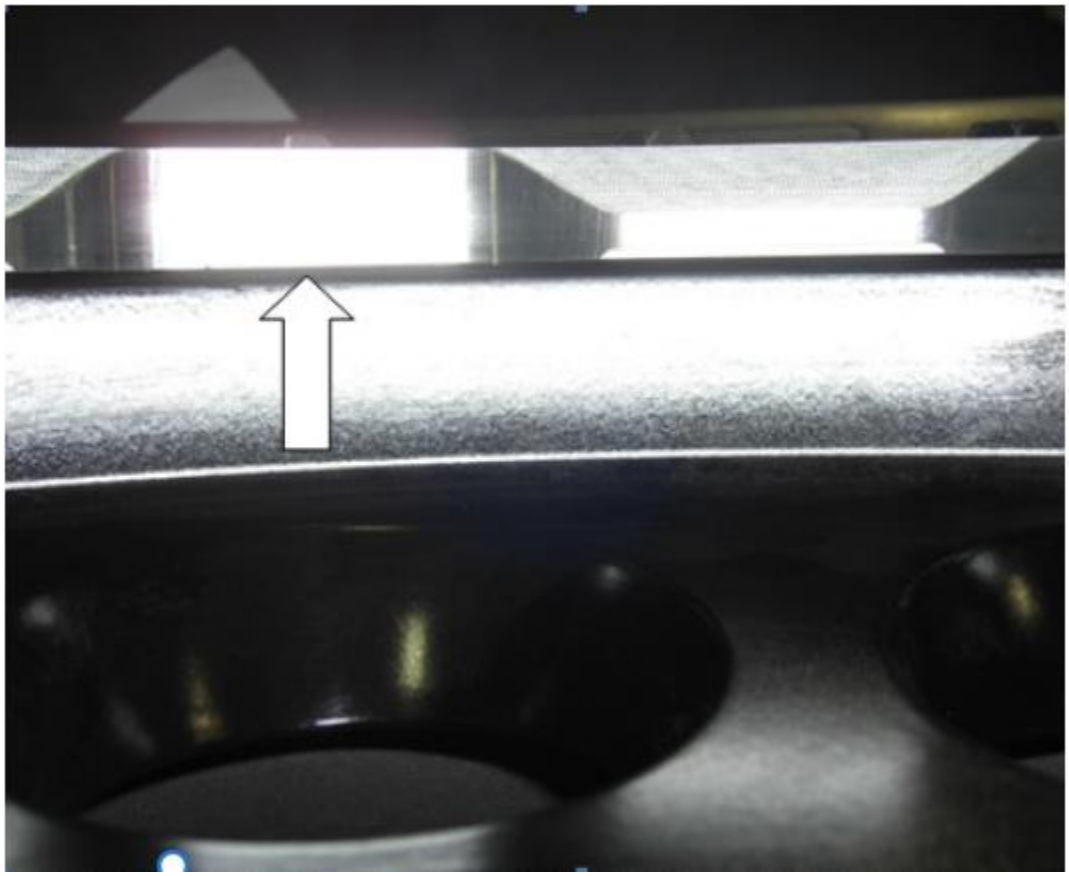


Pic 6.1 – Torque sequence

Pic 6.2 – Torque in the proper sequence using a torque wrench.

6.1 Using the sequence, torque all bolts to 15 Nm (11 ft-lb).
6.2 Repeat the torque sequence and torque all bolts to 35 Nm (26 ft-lb).
6.3 Repeat the torque sequence and torque all bolts to 65 Nm (48 ft-lb).
6.4 Recheck all bolts to 65 Nm (48 ft-lb). No torque sequence is necessary for this step.

STEP 7: Ensure all bolts are fully seating the ring onto the wheel. You will be able to tell as the bolts will gain torque quickly once they are bottomed out. All bolts must be bottomed out before the torque sequence is complete.
7.1 Ensure zero gap between the ring and wheel. (See Pic 7.1) Use a piece of paper or feeler gauge to check.



Pic 7.1 – Ensure no gap between ring and wheel

7.2 Stand the tire/wheel up and inflate. The rear bead will need to "pop" over the inboard bead hump while inflating.

DO NOT EXCEED 44 PSI during this step.

NOTE: Re-check bead lock retention bolt torque after the initial 500 miles of service. Tighten as necessary to 65Nm (48 ft-lb).

Re-installation of the Decorative Beauty Ring

After remounting the tires in the standard wheel bead position for on-highway driving, the standard wheel beauty ring should be re-installed to prevent the beadlock/beauty ring mounting holes from accumulating mud or debris and to reduce the possibility of corrosion.

STEP 1: Fully deflate the tire by removing valve stem core. Using a 13 mm socket and wrench, loosen each beadlock ring retention bolt and back each bolt out two turns (720°).

STEP 2: Remove all beadlock ring retention bolts, and remove the beadlock ring from the tire.

STEP 3: Lever the outboard bead of the tire inboard over the outer wheel flange.

STEP 4: Reinstall the tire valve stem core and inflate the tire, ensuring that both tire beads have fully popped into place and the tire is evenly seating around the rim.

DO NOT EXCEED 44 PSI during this step.

STEP 5: If the tire has rotated around the wheel rim during this process, the wheel/tire assembly will need to be rebalanced after the beauty ring has been remounted.

STEP 6: Use a T45 Torx wrench to snug all the beauty ring retention bolts by hand.

STEP 7: Using the appropriate torque sequence (See Pic 8.1), tighten each fastener to 30 Nm (22 ft-lbs).