

Manual Installation

For greater axial flexibility the ring can be inserted by hand and wound into a groove. Perhaps the easiest and quickest install method includes:

1. Separating the multiple coils and inserting an end into the groove.
2. Press down around the circumference and wind the ring into the groove.



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[Click here to watch our how-to video on Manual Installation - External / Shaft](#)

Wave Ring Installation

Even with the wave form, the installation is very similar.

1. Consideration is taken as the wave form and rings will snap radially under axial pressure.
2. Tooling is design with a polished or partial contact face to reduce the friction caused by the plunger.
3. The WaveRing features additional cling by adjusting the diameter for greater installation force.

Screwdriver Removal



Part of the no-tooling removal includes Smalley Retaining Rings featuring removal notches for extraction from within a groove. The notch creates a gap between the end of the ring and the shaft so that a blunt object can be inserted to pry the ring free:

1. Insert a screwdriver (or similar flat object) into removal notch.
2. Use tool to pry out first end of ring.
3. Grab ring and spiral it out of the groove.

Access Slot:

1. An access slot may also be integrated in tight clearances.
2. The slot exposes the radial wall and back edge of the ring.
3. Fit the tool behind the ring and pull up and radially to unwind the ring.



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