

Baldor•Dodge Raptor: Installation - Easy as 1-2-3

C.O. Engineering - Bearings and PT Components
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The Baldor•Dodge Raptor elastomeric split tire coupling uses a new, innovative design that meets or exceeds the torque, speed and misalignment capabilities of competitive split tire couplings. Additionally, built in standard features of the Raptor allow for easier installation and reduced maintenance. These standard features include slotted clamp ring holes and a horizontally split natural rubber flexible element with up to 50% lower torsional stiffness than competitive urethane designs.

The slotted clamp ring holes in the Baldor•Dodge Raptor offer 187% extra mounting hardware clearance versus competitor's circular through-holes. Figure 1 shows the interpretation of the extra clearance of the Raptor's slotted through-hole compared to the competitor's circular through-hole design. This provides users with additional clearance for significantly easier installation. Slotted clamp ring holes also minimize the potential for cross-threading and reduce the need for re-alignment during installation. Figure 2 provides a side by side comparison of the two types of through holes.



Figure 1: Competitor through hole (left) vs. Raptor slotted through hole (right)



Figure 2: Circular through holes (left) versus slotted through holes (right)

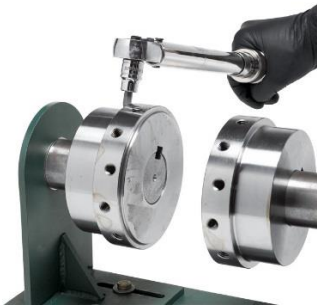
The Baldor•Dodge Raptor element uses a natural rubber compound, which is significantly more flexible than competitive urethane designs. The Raptor's natural rubber element yields up to 50% lower torsional and bending stiffness. Lower stiffness makes the element easier to manipulate by hand during installation. Since the element is easier to manipulate, it is noticeably easier to install on shafts that have any misalignment in the system.

With the Raptor's horizontally split element, fasteners are designed to install radially instead of axially, meaning that this design does not require the locking of shafts during installation. The two part element assembly separates horizontally along the shaft axis. This means the Raptor does not require movement or re-aligning of connected equipment when the element needs to be replaced. Figure 3 below provides a visual of the horizontally split element assembly and the radially mounted fasteners.



Figure 3: Split Natural Rubber Element Design

When it is time to install the Baldor•Dodge Raptor element, it is as easy as 1-2-3. The first step is to install one of the three styles of hubs. These include finished bore (clearance and interference fit), Taper-Lock bushed, and QD Bushed hubs. Step 2 is to set the hub spacing. This can be done by simply using one half of the element assembly as a guide or by utilizing the hub spacing values given in the instruction manual. The third and final step is to install the element. Place the element on the hubs, add the fasteners, and torque the fasteners to the requirements in the instruction manual. Figure 4 provides a graphical representation of these three steps.



Step 1: Install Hubs



Step 2: Set Spacing



Step 3: Install Element

Figure 4: Installation is as easy as 1-2-3.

The built in standard features on the Baldor•Dodge Raptor coupling makes installation quick and easy. The slotted clamp ring holes yield a noticeably easier installation than competitive designs. Raptor's split element design requires fewer tools and reduces the chances of shaft damage. The reduction in torsional stiffness makes the element easier to work by hand to align all of the slotted clamp ring holes with the shaft hubs. The results of these standard features, is an installation process as easy as 1-2-3.

For additional information or questions related to the Baldor•Dodge Raptor's Installation procedure, Baldor•Dodge Bearings and PT Component Customer Order (C.O.) Engineering should be contacted. Contact information for Baldor•Dodge C.O. Engineering can be found on the Baldor•Dodge Engineering Support webpage at <http://www.baldor.com/brands/baldor-dodge/product-support/engineering-support>.