



Technical Bulletin and Safety Alert

April 20, 2020

Subject: Hammer Union Safety – Detachable vs Non-Detachable Wing Nuts

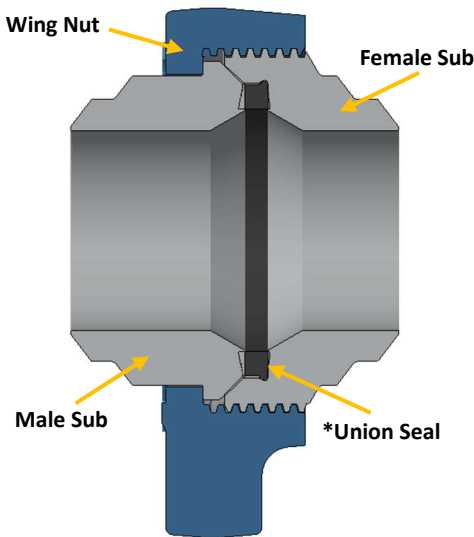
At Kemper Valve safety is our main concern, we hope all our valued customers read this Alert in its entirety to ensure safe iron practices.

Hammer Unions are a critical part of a typical iron string as they serve an essential purpose by being a means to safely and quickly make up or break an iron connection. They are typically comprised of a Male component, Female component, Seal Ring, and Wing Nut. Unions and Union End Connections with a Detachable Wing Nut also contain Segmented Rings and a Retaining Ring.

Hammer Unions and Hammer Union End Connections:

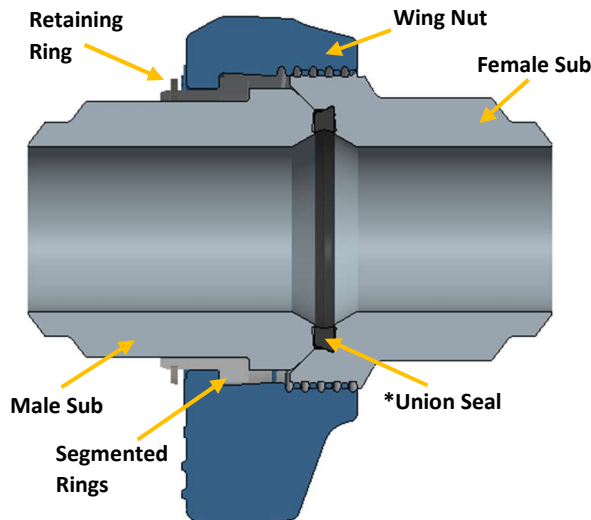


Non-Detachable Union



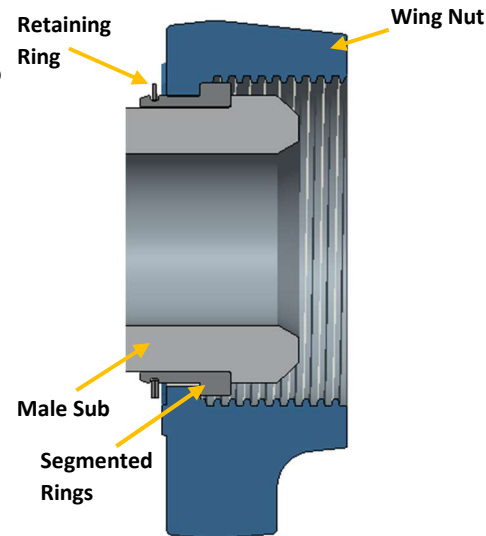
Part# 120430

Detachable Union



Part# 150430-01

**Union End Connection
(Detachable)**



4" 1502 Integral Connection

*Some Unions do not have a seal ring; they utilize a metal to metal seal)



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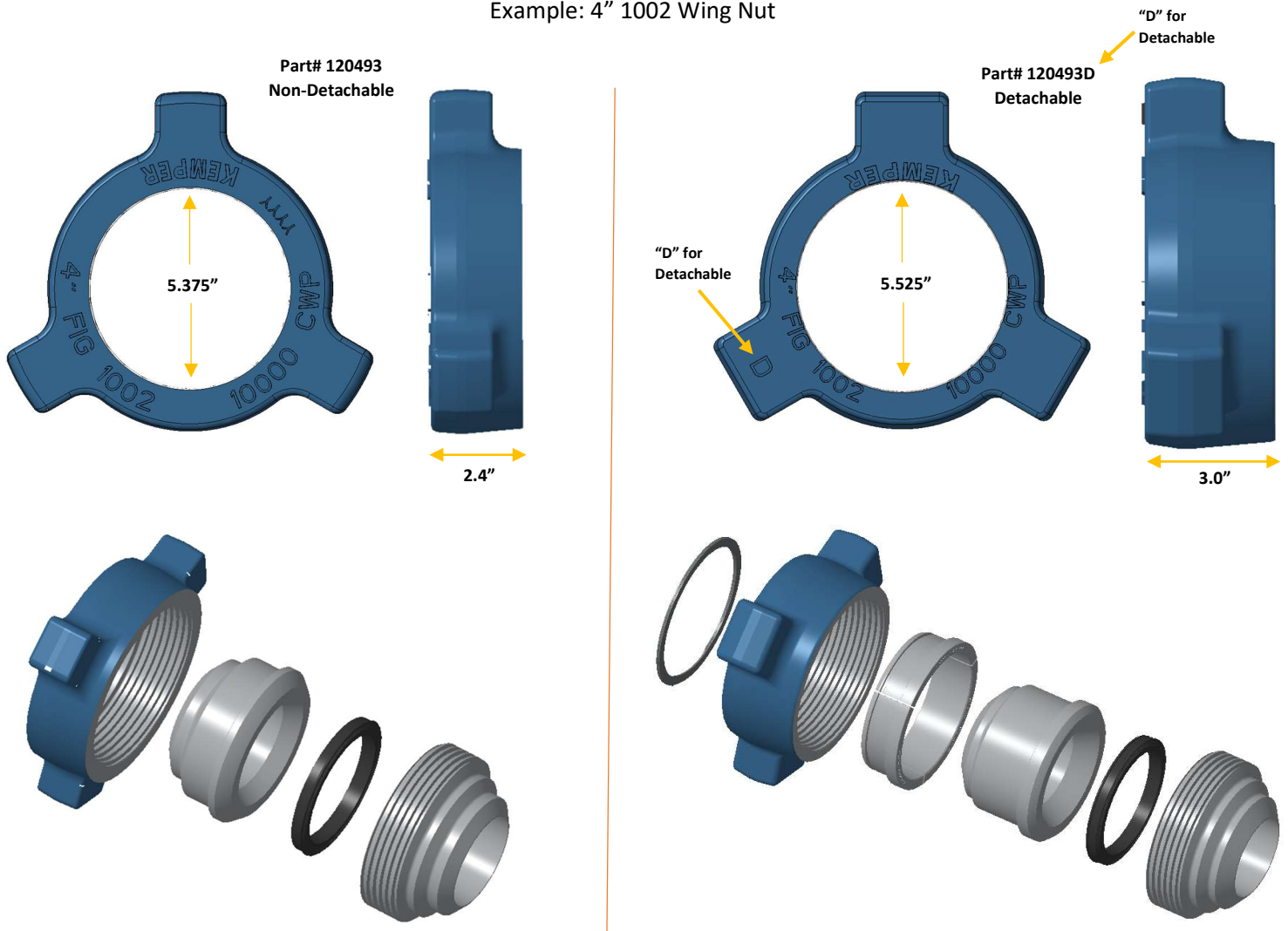
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There are many different Sizes, Pressure Ratings, Figure Numbers, and Styles available to choose from. If the markings on any component are illegible, do not use and discard immediately. Always assemble Kemper Valve Unions or Union End Connections with Kemper Valve Components. Never mix Unions of different Size, Figure, Style, or Pressure rating, doing so could lead to a catastrophic failure causing damage to equipment, serious injury to persons, or even death. Never mix Standard service and Sour Gas rated components even if they are the same size and figure.

Non-Detachable Wing Nuts (Hammer Lug Nuts) vs Detachable Wing Nuts (Hammer Lug Nuts):

The main difference between Detachable and Non-Detachable Unions is that the Male sub has a reduced OD to allow the Wing Nut to slide over it, which makes it possible for the end user to replace the nut if worn out. There are also notable differences between Detachable and Non-Detachable Wing Nuts as highlighted below. The Segmented Rings act as the retainer for a Detachable nut and make up the difference in material, while giving the nut a safe shoulder to pull against. Detachable nuts typically have "D" on the end of the Part# as well as a large "D" stamped on back of a lug.

Example: 4" 1002 Wing Nut





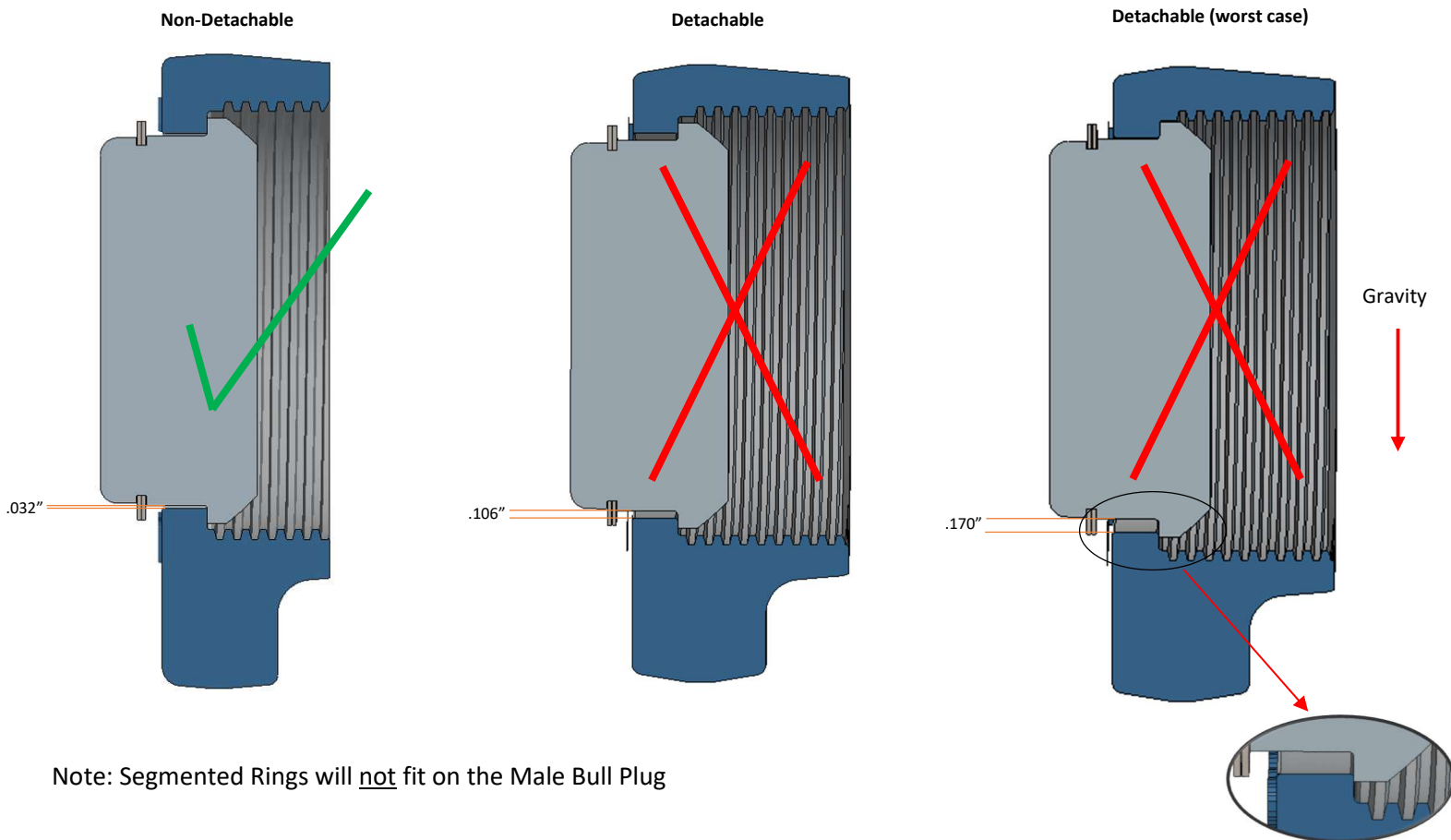
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Male Bull Plugs: Non-Detachable Wing Nut is standard

End Users must ensure that Detachable Wing Nuts are not installed and that only identical replacement Wing Nuts are used. As you can see from the images below when installed vertically gravity, will exacerbate the already limited mating condition due to the weight of the nut. If a Detachable Wing Nut is accidentally installed, the limited engagement between the shoulder of the Wing Nut and the Male Shoulder could lead to a catastrophic failure causing damage to equipment, serious injury to persons or even death.

Example: 4" 1002 Male Bull Assembly



Note: Segmented Rings will not fit on the Male Bull Plug

If you question a Union make-up, Stop and contact your Supervisor, Sales Rep, or Kemper Valve Product Engineering