

Carbonation Cap Design Review



KegLand Distribution PTY LTD

www.KegLand.com.au



The red coloured carbonation caps are a high volume product sold by Kegland and due to the fact that it's now being put in various different kits it is a product that is more frequently under review.

This particular product is already significantly better than the other competing products on the market however some potential refinements have been highlighted.

1. Male PCO Thread Stress Marks

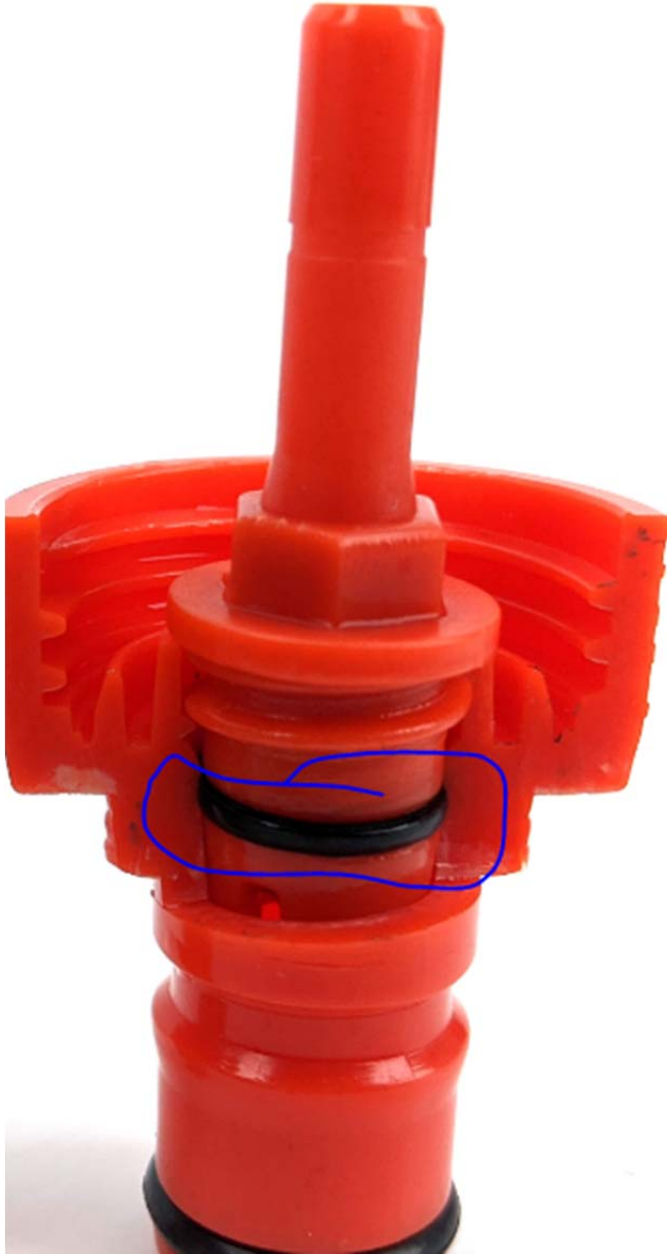
It has been noticed from some customers that the cap can damage the neck of the Male PCO 1881 thread and apply too much force when over tightened.

As shown below minor stress marks can be noticed around the edge of the PET bottle and this caused the male threaded component not to last as long as it should.



2. O-ring Damage During Disassembly/Assembly

Some customers were noticing some minor damage to the o-ring below and this could cause some leakage.



3. Grip

Some customers stated that the surface of the carbonation cap was a bit slippery when wet.

Revisions

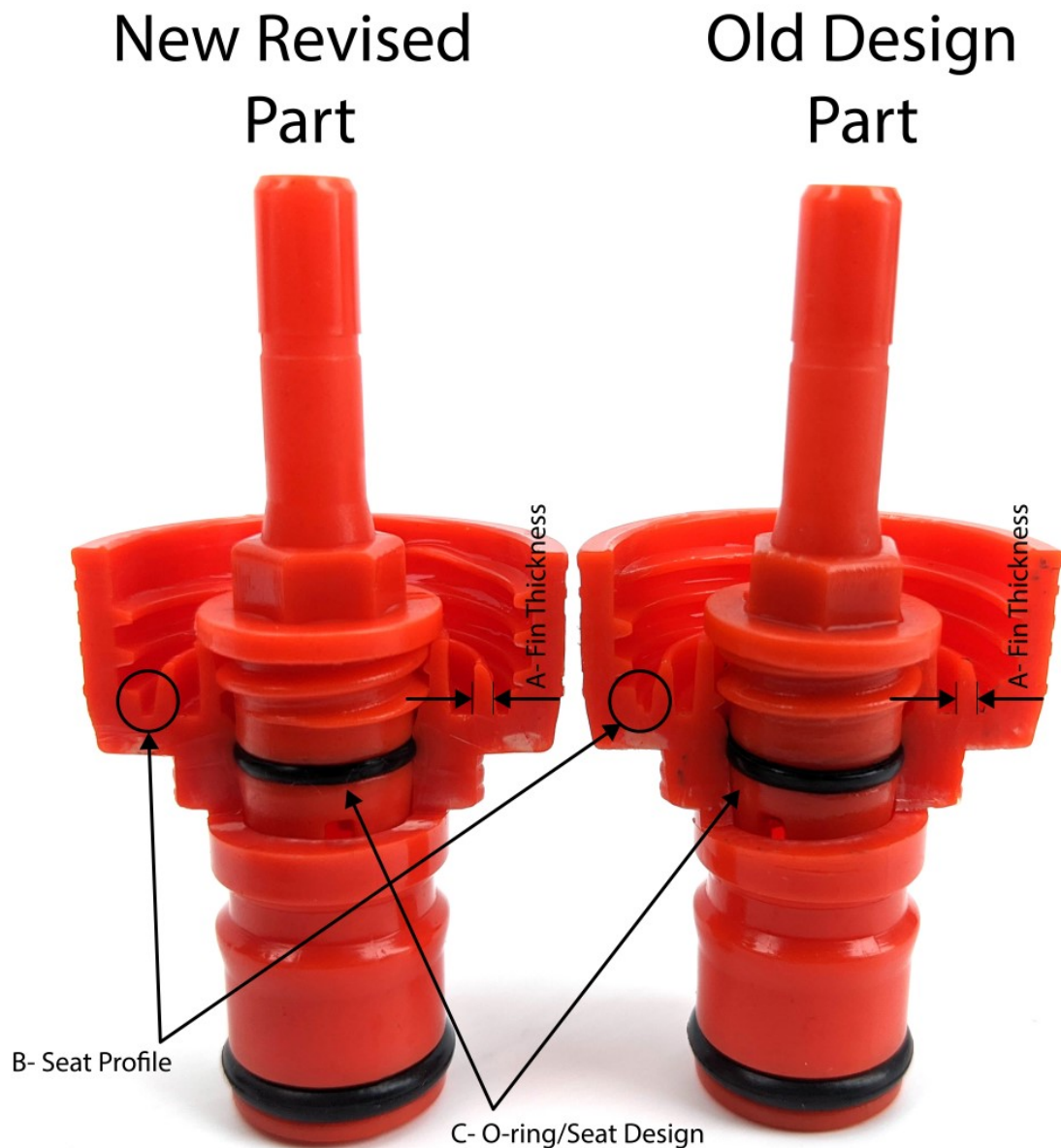
To solve these issues four main revisions have been made.

A – Fin Thickness

On the new part the fin thickness has been changed and made thinner. This reduces the stress on the male part of the PCO thread.

B – The seat profile has changed to prevent the product being over tightened and this reduces the chance of damage

C – The o-ring seat and o-ring type has been changed so the o-ring sits better so it can be inserted and removed without causing damage as easily.



D – Grips have been added around the circumference of the part making it easier to grab when wet. This is also the easiest way to visually identify the difference between the old design and new design part.

