



## Lubecore Technical Announcement

### Manifold End Plugs

Lubecore is pleased to announce an improvement to the 21.006 manifold plug. The original 21.006 plug had an O-ring retention groove as shown below in Figure 1. After the tooling and technology to make this type of groove became too difficult to maintain, an interim design was offered as shown below in Figure 2. The philosophy of keeping the O-ring retained in the bottom face of the plug was maintained in this design, however, this groove did a poor job of retaining the plug O-ring. The new design shown in Figure 3 moves away from the face seal approach and uses an O-ring against the manifold countersink instead of trying to get an O-ring to seal on the manifold face. This O-ring retaining method keeps the seal in place on the plugs when shipping or in inventory.

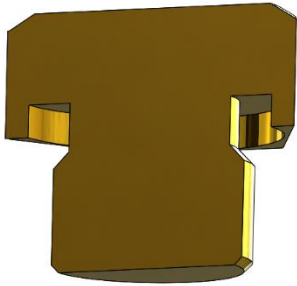


Figure 1

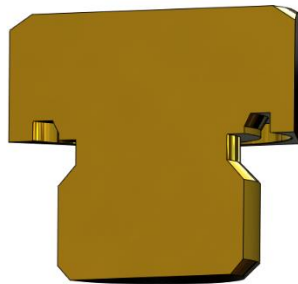


Figure 2

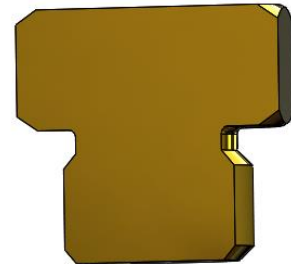


Figure 3

The sealing arrangement on the new plug is shown below in Figure 4:

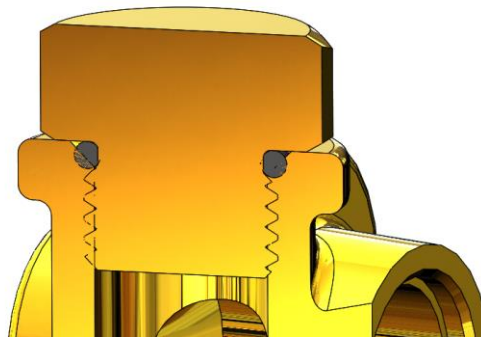


Figure 4

The plug was pressure tested. The test included a manifold with a straight fitting feeding the inlet and a new 21.006 plugging the outlet. The pressure was increased until the nylon mainline burst at close to 4000 psi. There was no leakage from the manifold end plug confirming that its performance is acceptable.



Figure 6 Post Test Plug



Figure 5 Test pressure achieved