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Parts and production for leak free shock struts.-all parts are available.

Note: the hole has been tapped .600" deeper than the rod end threads. The special loc-tite sealant was inserted down the tube via a straw for the plug. This requires a cleaning process and 24 hr. dry period for the sealant to set up. More details on next pages.

To set up for a leak free life from your shock struts, we need to eliminate the oil pressure working on the rod end bearing threads. You can see the plug that has been inserted to stop any and all oil from coming up the tube. Strait cut threads as are used on the rod ends are not a good match for high pressure oil stoppage, it is really asking a lot for your sealant to stop this seepage. . Not shown here is the jam nut with O-ring seal that would go on the rod end. That is the second line of defense though it should not be required. This will also allow for anti-seeze on the rod end threads for future service work, if required.

If lock tite/seal is placed on threads of the rod end, at some point in time we may want to adjust this rod end. Yes? Using the above approach, we won't have to worry about a set up-seal that is stuck super tight. *Also please note the chamfer on the rod end. With out this your running a great risk of cutting an o-ring.*

The two numbers for sealant to use. Loctite is 569 with primer 39118 or commonly called Primer N or the spin off of loctite is this product AST-SEAL HYD

The all important chamfer shown here. This is to prevent the top cap o-ring seal cutting that can occur.

Scott fact: 1

Just covering some of the things that are common knowledge to hydraulic folks, but for us that only deal with actions of the cylinders and not the building, we need to know the ins and outs of how this is going to work. In a sense, we are creating a cylinder that has to be able to handle high pressure at times (landings with high sink rates), be controlled on the flow rate (hole in the rod above for oil flow), and to be able to always hold oil. (leak free during all conditions)

Scott fact 2

While you can build these to specs, and technically you would be correct, additional work here will pay great dividends. Putting chamfers in the points shown above will greatly help installing the o-rings cut free. So no sharp edges, that includes the larger o-ring channel shown here barely below the picks (the outer o-ring seal)

Inner chamfer work done in the same manner.

The ramp to the tube needs to also be chamfered, as this location is where the o-rings slide in (piston and the bronze cap ring) We can't risk cutting those after all this work has been done.

Scott fact 3

When depressing the top cap, great care needs to be done so that piston is not damaged/hit on the i.d. of the cyl. Used to hold the tension bolt. Some sockets will work, some are to small inside.

Below, while this is a great way to steer clear of the pistion, it makes it very hard to get the snap ring in place.

In the end, a little searching for the right tube extension will do the trick.

Thanks for checking in on the great shock struts, these are just helpful hints, if you have anything to add, just let me know.

I have all parts shown available off the shelf most times. All chamfer work done.

The 0-ring seal kits are available from Bob for $17.00/pair.

Scott Weinberg