Instructions

The new ET400DC-12Z and ET400DC-16Z collets along with the new ET400AR-10 adapter ring now make it possible to crimp -12 and -16 size Z-series fittings on a T-400 crimp machine. However, crimping these sizes requires a little extra care to ensure the adapter ring is properly positioned against the locator pins that center the adapter ring to the hole in the T-400 base plate. The reason for this is that unlike previous tooling, the new ET400DC-12Z and ET400DC-16Z collets actually protrude out the bottom of the adapter ring slightly in the final crimp position. Failure to properly center the adapter ring to the base plate hole might cause the collets to bottom out on the base plate which will yield an excessively large crimp diameter. (Note: the final crimp diameter should always be checked prior to placing a hose assembly into service.)

Centering instructions

1. Assess alignment condition: Place the new ET400AR-10 adapter ring in T-400 crimp machine and position against the two back locator pins (figure 1). Look down through the center of the adapter ring to determine alignment condition with the T-400 base plate hole (figure 2). If the T-400 base plate overhangs more than 1/32 of an inch (about the thickness of a credit card) on any side of the adapter ring, step 2 must be completed to adjust the alignment.

Positioning the adapter ring against the locator pins does not always guarantee centering to the base plate hole. The manufacturing tolerances of some older of T-400 crimp machines may allow for excessive misalignment (this would not have been a problem in the past because all previous collets did not protrude out the bottom of the adapter ring). Therefore, the below procedure should be followed to assess the alignment condition and bring it within acceptable limits prior to using the ET400DC-12Z and ET400DC16Z collets for the first time.

![Figure 1](image1.png)

![Figure 2](image2.png)

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2. Adjust adapter ring alignment:
   
a. Center adapter ring to base plate hole by moving it away from locator pins. Evaluate the gap created between each locator pin and the adapter ring (figure 3). Note: the gap may be different for each locator pin if misalignment occurs from side to side.

b. This kit includes two offset shims (figure 4) that can be used to fill these gaps and center the adapter ring with the T-400 base plate hole. Slide one shim over each locator pin until it bottoms out on the base plate.

c. The shims vary in thickness around their circumference. Rotate each shim until the thickness between the locator pin and the adapter ring matches what is needed to center the adapter ring (figure 5).

Correctly positioning both shims will allow for the proper alignment adjustment. These shims will need to remain over locator pins for future ET400DC-12Z and ET400DC-16Z crimping. There is no need to remove the shims to crimp other sizes of hoses – they can remain permanently over the locator pins.

Figure 3

Figure 4

Figure 5