

REPLACEMENT FLANGE PROCEDURES FOR HIGH LIFT FLANGE TEST & WELDING PLUGS

Curtiss Wright EST Group recommends removal of most components to inspect parts for wear/damage and to protect O-rings during the flange replacement procedure.

1/2" – 1" Flange Sizes (refer to Figure 1.)

1. Remove Hex Nut & Jam Nut from bottom of Shaft.
2. Remove Bottom Washer, Seal, and Washer from Shaft.
3. Remove the Compression Tubes.
4. Remove the Flange Assembly.
5. Lubricate O-ring groove inside the new Flange Assembly, lubricate the new O-ring, and install into new Flange Assembly if not already pre-installed.
6. Install new Flange Assembly onto Shaft taking care not to damage the O-ring on threads.
7. Install the Compression Tubes.
8. Install first Washer, Seal, and Bottom Washer. **Note: The washers must be placed on the Shaft so that the serrated (non-smooth) surface of the washer contacts the Seal.**
9. Install Jam Nut onto Shaft as far as possible. Install Hex Nut and wrench tighten Hex Nut against Jam Nut.
10. Plug is ready for testing.

1-1/4" – 3" Flange Sizes (refer to Figure 2.) and 4" Flange Size (refer to Figure 3.)

1. Remove Hex Nut & Jam Nut from Shaft.
2. Remove Seal and both O-ring Washers from Shaft, taking care not to damage either O-rings in the ID of washers.
Note: Inspect the O-rings and replace if worn or damaged
3. Lubricate both O-rings in ID of washers with O-ring Lube.
4. Remove the Compression Tubes.
5. Remove the Flange.
6. Lubricate O-ring groove and the new O-ring and install into new Flange, if not already pre-installed.
7. Install new Flange onto Shaft taking care not to damage the O-ring on threads.
8. Install the Compression Tubes.
9. Carefully install one O-ring Washer onto Shaft. **Note: The O-ring Washer must be placed on the Shaft so that the serrated (non-smooth) surface of the Washer contacts the Seal.**
10. Install Seal and second O-ring Washer. **Note: The O-ring Washer must be placed on the Shaft so that the serrated (non-smooth) surface of the Washer contacts the Seal.**
11. Install Jam Nut onto Shaft as far as possible. Install Hex Nut and wrench tighten Hex Nut against Jam Nut.
12. Plug is ready for testing.

6 - 24" Flange Size (refer to Figure 4.)

1. Remove Hex Nuts, Hardened Washers, and Compression Tubes from Flange.
2. Remove the Flange and Outer Pipe Support from the Shafts and Lower Support Assembly.
3. Remove Socket Head Cap Screws from the Outer Pipe Support. Remove the Outer Pipe Support from the Flange.
Note: Inspect the Flange O-ring and Interior O-rings, and replace if worn or damaged.
4. Lubricate the Flange O-ring groove and the Flange O-ring and install the Flange O-ring into the Flange O-ring groove.
5. Use the Socket Head Cap Screws to install the Outer Pipe Support into the back of the new Flange, ensuring proper O-ring fit.
6. Slide the new Flange and Outer Pipe Support onto the Shafts and into the Lower Support Assembly.
7. Install the Compression Tubes, the Hardened Washers, and the Hex Nuts.
8. Plug is ready for testing.

Questions? Contact EST Group Customer Service at any of the following locations.

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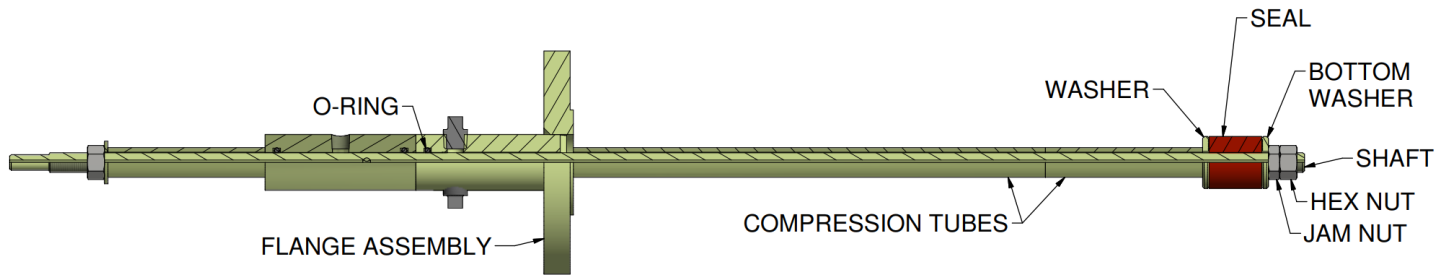


Figure 1: 1/2" – 1" Flanges

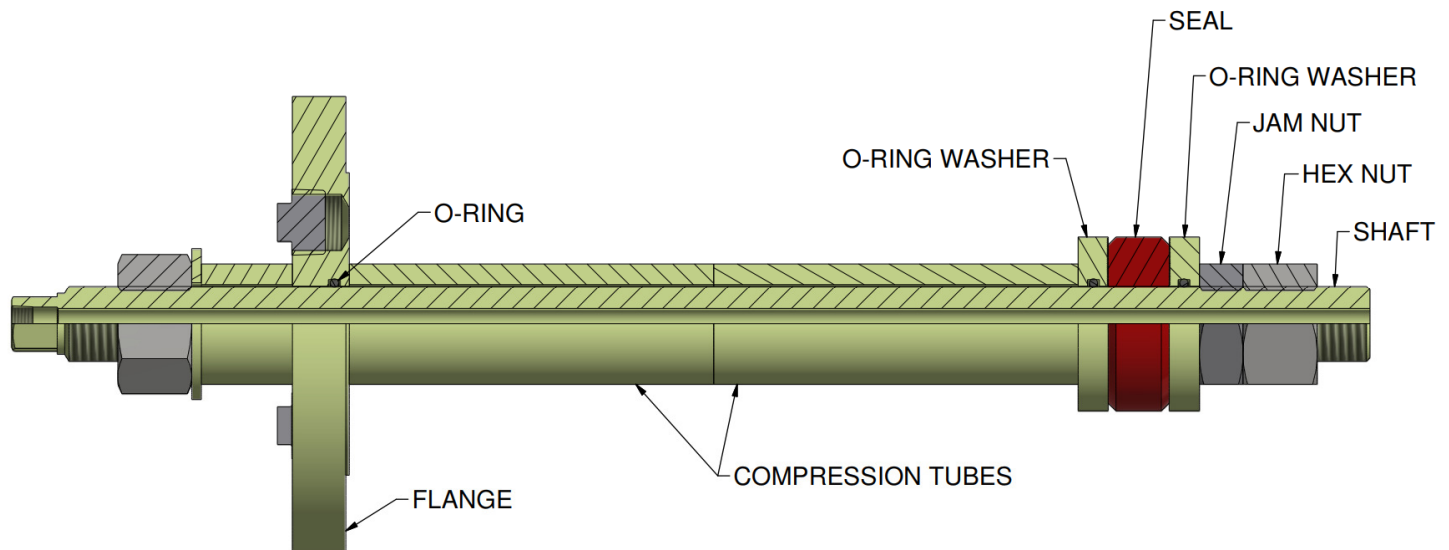


Figure 2: 1-1/4" – 3" Flanges

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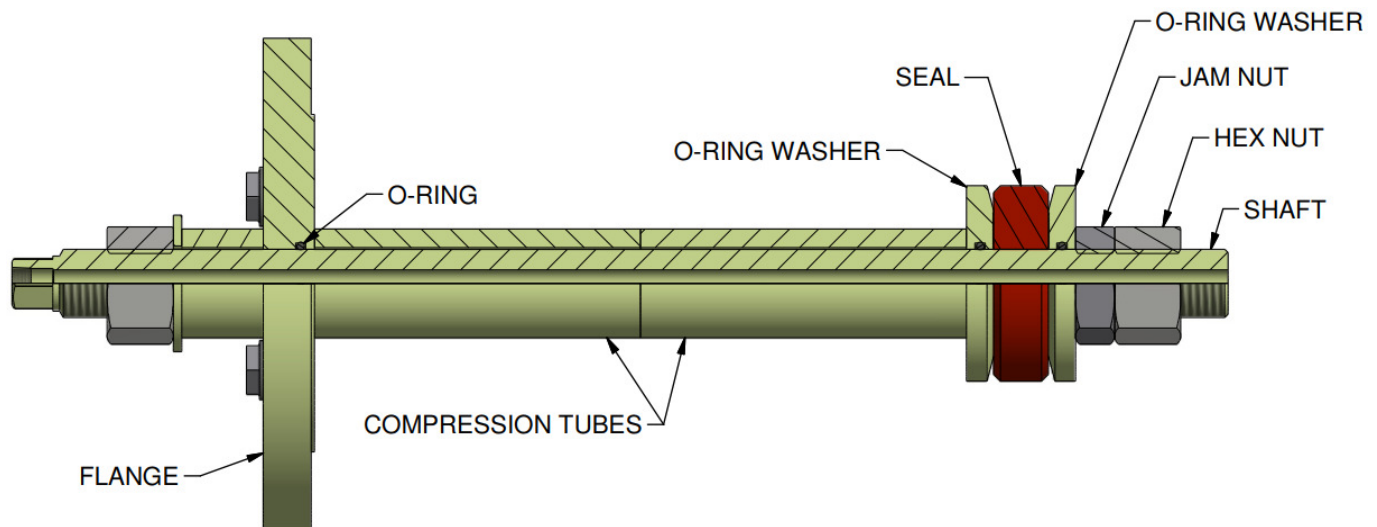
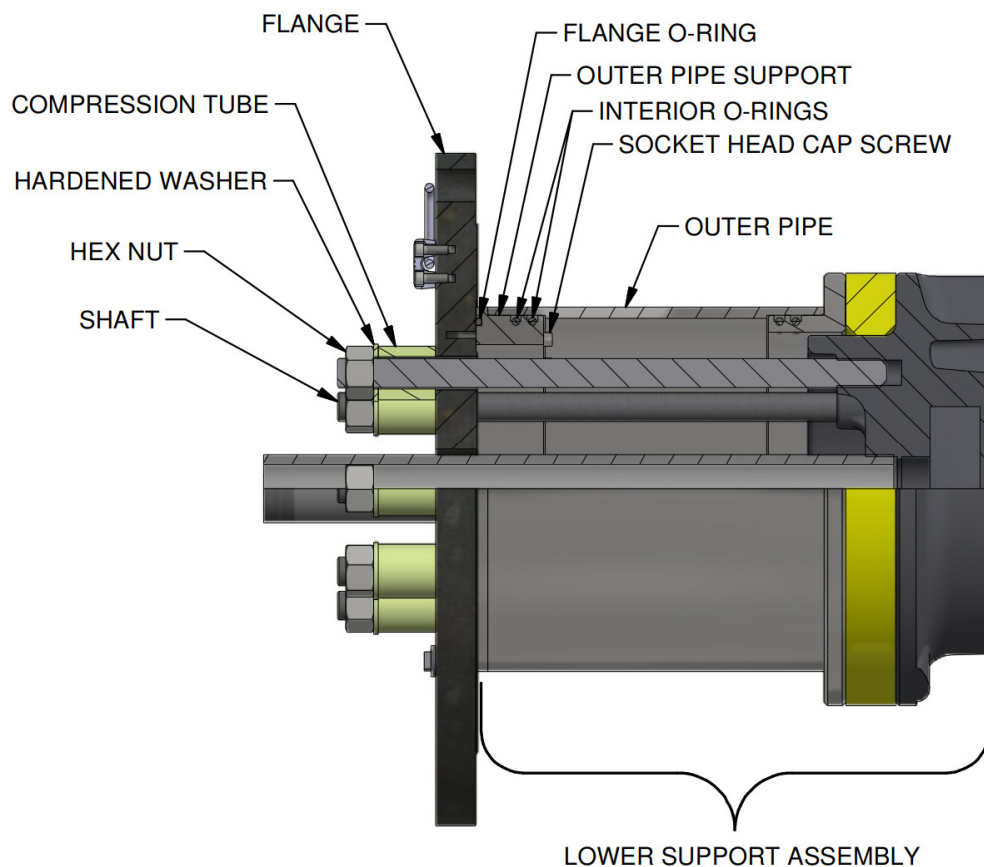
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**Figure 3: 4" Flange**

LOWER SUPPORT ASSEMBLY

Figure 4: 6-24" Flange

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