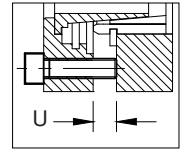




"WF" Bushing with "F" Series Reducers

Single Sided Bushing Installation Instructions

ATTENTION: The gap from the Pressure Ring to the Clamp Ring is determined by two (2) hollow head "spacer bolts". This gap should remain the "U" dimension as shown in Table No. 1 until the unit is mounted onto the shaft. Be sure the inside and outside diameters of the Tapered Cone and Flanged Cone Assembly are free of grease and oil. The Flanged Cone Assembly is the Flanged Cone, the Support Spacer, and the Expansion Ring. The machine shaft end should have a $1/32 \times 45^\circ$ chamfer minimum for ease of installation.



Assembly of Single Sided "WF" Bushing

The bushing will be installed into the housing on the side of the reducer that was specified at the time the order was placed. The shaft must be long enough to engage the support ring in order to be "wobble free".

1. Clean the machine shaft.

WARNING: Shaft must be free of grease for bushing to clamp properly.

Mount the reducer onto the clean shaft.

2. Remove the two (2) hollow head "spacer bolts". Tighten the capscrews to the torque shown in Table No 1. The tightening should be done gradually in a rotating sequence and will require more than one (1) rotation to tighten properly.

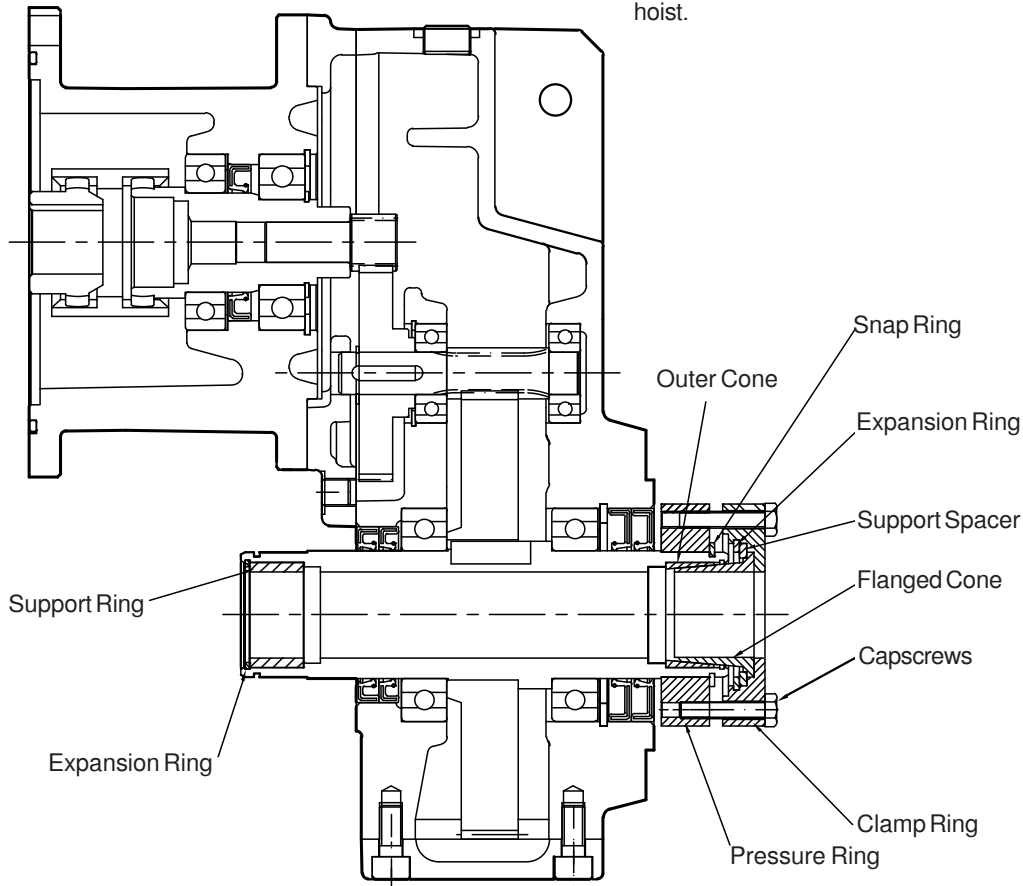
After two (2) hours (minimum) running time, check capscrews and retighten to the specified torque, if necessary.

Table No. 1

Base Module	Capscrews		Tightening Torque		U	
	Qty.	Size x Length	Nm.	in. lbs.	mm	inches
F102	6	M6 x 20 mm	10	89	5	.20
F202/F203	8	M6 x 30 mm	10	89	5	.20
F302/F303	8	M6 x 30 mm	10	89	6	.24
F402/F403	8	M8 x 30 mm	25	221	6	.24
F602/F603	8	M10 x 35 mm	49	434	6	.24

Removal of Reducer with a "WF" Bushing

1. Remove all capscrews (90.100).
2. Mount two (2) capscrews into the two tapped holes of the Flanged Cone Assembly to push against the Pressure Ring and release pressure between the Flanged Cone and the Tapered Cone.
3. Remove the reducer from the machine shaft using a crane or hoist.



STÖBER Drives Inc.

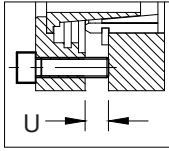
"WF" Bushing with "F" Series Reducers

Double Sided Bushing Installation Instructions



ATTENTION: The gap from the Pressure Ring to the Flanged Cone Assembly is determined by 2 hollow head "spacer bolts". This gap should remain the "U" dimension as shown in Table No. 1 until the unit is mounted onto the shaft.

The machine shaft end should have a $1/32 \times 45^\circ$ chamfer minimum for ease of installation.



Assembly of Double Sided "WF" Bushing

The double bushing is shipped as a kit. There is a Support Flanged Cone Assembly and a Clamp Flanged Cone Assembly. The Support Flanged Cone Assembly is the bushing with the coating on the cone. DO NOT use cleaner on the coated cone.

1. Clean the Tapered Cone and the quill counterbore. Press the Tapered Cone into the quill. Be sure to install the cone with the smaller diameter toward the inside.

2. **The Support Flanged Cone Assembly must be installed on the machine side of the reducer.**

Install the Support Flanged Cone Assembly with its slot opposite (180°) the slot of the Tapered Cone already installed. Insert the capscrews and tighten **ONLY** hand tight.

DO NOT REMOVE THE SPACER BOLTS.

3. Repeat the above procedure for mounting the Clamp Flanged Cone Assembly on the other side.

Table No. 1

Base	Capscrews		Tightening Torque		U	
	Module	Qty.	Size x Length	Nm.	in. lbs.	mm
F102	6	M6 x 20 mm	10	89	5	.20
F202	8	M6 x 30 mm	10	89	5	.20
F302	8	M6 x 30 mm	10	89	6	.24
F402	8	M8 x 30 mm	25	221	6	.24
F602	8	M10 x 35 mm	49	434	6	.24

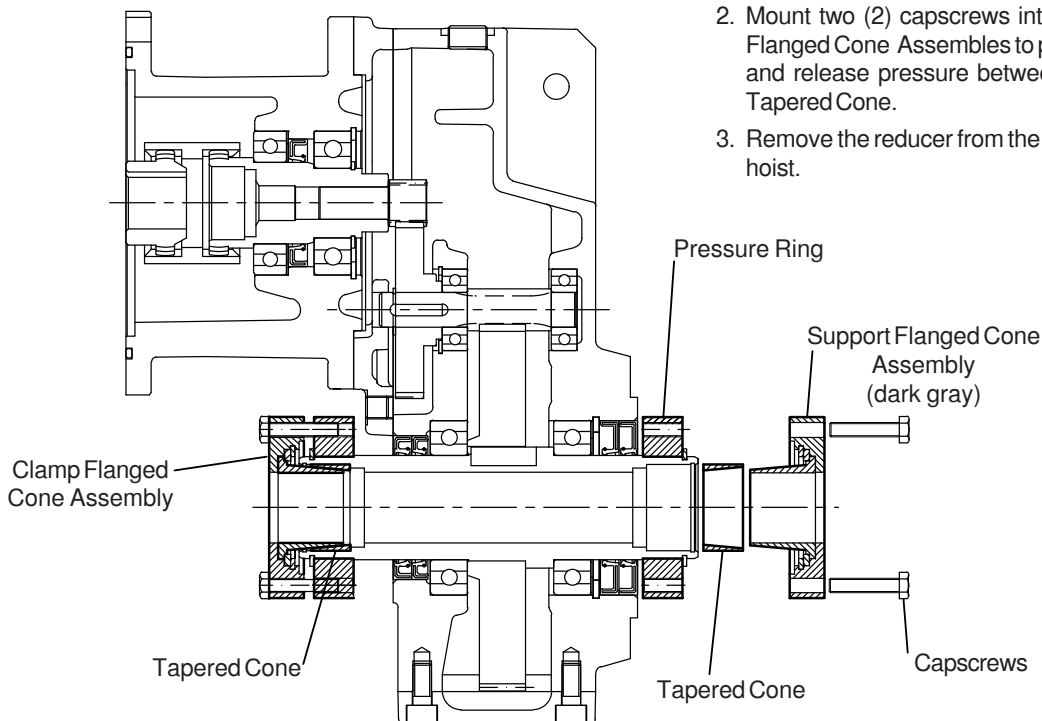
Installation of Reducer onto a Shaft

1. Clean the machine shaft. **WARNING: Shaft must be free of grease for bushing to clamp properly.**
2. Guide the shaft through the bore of the quill until it reaches but does not protrude through the end of the clamp ring on the clamp side. (If the shaft has a keyway, insert the shaft into the bushing with the Tapered Cone slot over the keyway.)
3. Remove the spacer bolts.
4. **TIGHTEN CLAMP SIDE FIRST.** Tighten all capscrews to the torque shown in Table No. 1. Use a torque wrench. The tightening should be done gradually in a rotating sequence and will require more than one (1) rotation to tighten properly.
5. Tighten all Capscrews on the Support Side.

After two (2) hours (minimum) running time, check capscrews and retighten to the specified torque, if necessary.

Removal of Reducer with a "WF" Bushing

1. Remove all clamp and support side bushing capscrews.
2. Mount two (2) capscrews into the two tapped holes of the Flanged Cone Assemblies to push against the Pressure Ring and release pressure between the Flanged Cone and the Tapered Cone.
3. Remove the reducer from the machine shaft using a crane or hoist.



STÖBER Drives Inc.