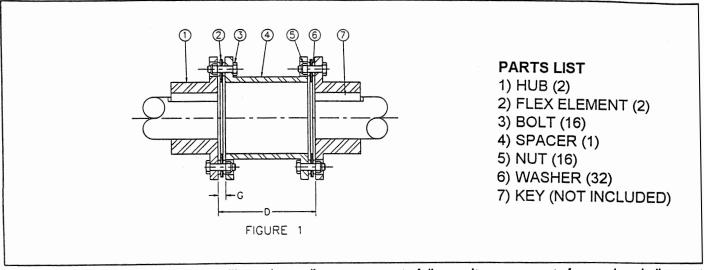


# Form-Flex® Floating Shaft Coupling Type DP All Sizes Installation Instructions

P-5002-TBW FORM 1171

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### ✓ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov



Proper care in installing and aligning will permit couplings to operate to full capacity, compensate for angular misalignment and provide very good service life.

Shafts may become misaligned as a result of many natural and unavoidable causes. Heat, vibration, bearing wear, settling o foundations, etc., all tend to alter initial alignment. To ensure long life, re-check alignment after a short period of actuar running.

In general, coupling life is increased when shafts are initially aligned carefully. If this is not done and a coupling is heavil-stressed by torque or other forces, it will have little reserve left with which to accommodate misalignment stresses; and might not provide the length of service intended. The closer the alignment TIR is to zero, the better the service life of th coupling.

#### INSTALLATION

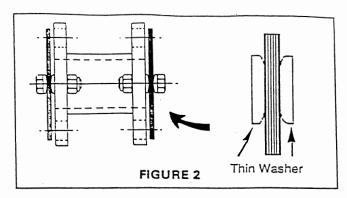
- 1. Inspect shafts and hubs and make sure they are free from burrs. Check for the proper fit of the keys to the shafts and hubs
- 2. Fit the coupling hubs so that the shaft ends are flush with the face of the flange. If the hub is bored for an interference fit the hubs should be heated in oil @ 200-250°F and then quickly positioned on the shaft. Do Not spot heat as it may cause distortion.
- 3. Move the equipment to be connected into position. Set the gap between the hub faces to be required, distance between shaft ends, D dimension. Set the average gap between flanges, dimension "G" in table I, for the proper size coupling.
- 4. Assemble the blade packs to the spacer as shown in Figure 2. Tighten these nuts to the proper torques as indicated in Table II.

TABLE 1 - FLANGE TO FLANGE DIMENSION "G" (In inches)

Γ	SIZE	31	35	37	42	45	50	55	60	70
ı	G	.44	.54	.69	.69	.75	.96	1.04	1.10	1.40

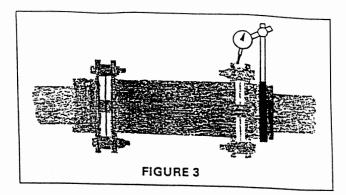
TABLE 2 - NUT TIGHTENING TORQUE (Lightly oiled threads on stainless fasteners)

	IAB	LE Z - NU I	IIGHIEM	NG TORKE	ORGOE (Lightly offer threads on stanness fusioners)							
1	SIZE	31	35	37	42	45	50	55	60	70		
	FT*I B	40	70	95	125	150	210	320	450	575		



#### ALIGNMENT

- Bring the equipment into an approximate good alignment, by attaching one end of the spacer to the equipment. (Be sure the spacer assembly is fully supported at this time. If it is not, damage to the connected blade pack may result.)
- With one end of the coupling attached, align the two pieces of equipment well enough to assemble the opposite end of the spacer to its hub.
- Attach a dial indicator to each hub. Indicate a point on the nearest spacer flange face as shown. Any method may be used to attach the indicator to the hub, be sure it is firmly attached. See Figure 3.
- Rotate the coupling 360° to locate the minimum reading on the dial, then rotate the body or face of the indicator so that the zero reading lines up with the pointer.



- 5. Rotate the coupling 360° while watching the indicator for misalignment readings. The driver and driven equipment will be aligned when the maximum indicator readings are within the allowable limits as shown in Table III. Adjust the equipment as necessary to comply with the limits.
- Repeat this method for the other end of the coupling.
   Note: When the equipment is properly aligned, it is advisable to dowel a right angle gear box to its base. It has been found from experience that right angle gear boxes tend to creep in a counter rotational direction. Recheck alignment after doweling.
- With equipment aligned and coupling assembled make sure all bolts and washers are in the proper orientation. The curved face of the washer must face the blade pack as shown in Figure 2.

IMPORTANT: To ensure long life re-check alignment afte. short period (one to two hours) of actual running. At this tim also re-torque bolts and nuts to values in table.

TABLE 3 - TOTAL INDICATOR READINGS (Inches)

SIZE	31	35	37	42	47 1 15		55	60	70	
TIR *	.004	.004	.004	.005	.006	.006	.007	.008	.009	
* Equipoles	44- 7-1					.000	.007	.000	.009	

<sup>\*</sup> Equivalent to 7 deg per flex element. Lower T.I.R. readings will provide better alignment of shafts and longer service life.

IMPORTANT: To insure long life, re-check alignment after a short period of actual running. At this time, re-torque bolts & nuts to values in Table 1

#### REPLACEMENT PARTS

Replacement parts are available from TB Wood's Incorporated through your local distributor. Part numbers are shown in the table below.

Double repair kits consist of two sets of flex discs, coupling bolts and nuts, element washers and spacer mounting fasteners.

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ITEM	DP31	DP35	DP37	DP42	DP45	DP50	DP55	DP60	DP70
DOUBLE REPAIR KITALLOY STL DISCS		DA35DF	DA37DF	DA42DF	DA45DF	DA50DF	DA55DF	DA60DF	DA70DF
DOUBLE REPAIR KIT-STAINLESS STL DISCS	DA31BFSS	DA35BFSS	DA37BFSS	DA42BFSS	DA45BFSS	DA50BFSS	DA55BFSS	DA60BFSS	DA70BFSS
FLEX DISCALLOY STEEL	D31-5	D35-5	D37-5	D42-5	D45-5	D50-5	D55-5	D60-5	D70-5
FLEX DISCSTAINLESS STEEL	D31-5-SS	D35-5-SS	D37-5-SS	D42-5-SS	D45-5-SS	D50-5-SS	D55-5-SS	D60-5-SS	D70-5-SS

#### WARNING



ROTATING EQUIPMENT IS POTENTIALLY DANGEROUS AND MUST BE PROPERLY GUARDED. THE USER SHOULD COMPLY WITH APPLICABLE SAFETY CODES IN ACCORDANCE TO OSHA STANDARDS.



#### www.tbwoods.com

440 North Fifth Avenue Chambersburg, PA 17201 - USA 888-829-6637 • 717-264-7161