

INTRODUCTION — This manual applies to Sizes 15 thru 85A Falk Airflex non-lubricated floating shaft couplings. The performance and life of the couplings depend largely upon how you install and service them. Carefully follow the instructions in this manual for optimum performance and trouble free service.

PARTS IDENTIFICATION — All coupling parts have identifying part numbers as shown above. When ordering parts, always specify **SIZE, TYPE, MOUNTING** and **PART NUMBER** of each part. For hubs, specify bore and keyway size.

BALANCED COUPLINGS — Balanced coupling parts are match marked and must be assembled with mating match marks aligned. Observe any special instructions provided with the coupling.

CAUTION: Consult applicable local and national safety codes for proper guarding of rotating shafts and couplings.

INSTALLATION — Standard mechanics tools, wrenches, a straight edge, dial indicators and a magnetic base are required to install Falk Airflex couplings. Installation instructions that follow are for mounting 5; however, the basic procedure and alignment limits in Table 1 are the same for all mountings. All glands are furnished with zero psi gauge air pressure. Operate coupling within ambient temperature range of -14° to $+150^{\circ}$ F (-25° to $+66^{\circ}$ C). Protect the gland from oil and other substances that deteriorate rubber. Clean the gland with a strong solution of hot water and a commercial detergent.

Coupling Sizes 15 thru 18 are generally furnished for **CLEARANCE FIT** with set screws. Sizes 21 thru 85 are furnished for an **INTER-FERENCE FIT** without set screws. Heat hubs with interference fit in an oil bath to a maximum of 275° F (135° C) to mount. The oil flashpoint must be 350° F (177° C) or higher.

TABLE 1 INSTALLATION DATA — DIMENSIONS INCHES

SIZE	Bolt Tightening Torque lb-in.			Parallel & Angular Alignment Limits [▲] (TIR)	G								
	Adapter Hub	Adapter to Gland	Gland Hub		Mtg. 3	Mtg. 4	Mtg. 5	Mtg. 6	Mtg. 9	Mtg. 10	Mtg. 11	Mtg. 12	Mtg. 13
15A	420	276	180	.015	3.31	.69	3.47	.84	.84	3.59	.97	4.22	1.59
16A	420	276	180	.015	3.56	.69	3.72	.84	.84	3.84	.97	4.47	1.59
18A	420	600	180	.015	3.81	.69	3.97	.84	.84	4.09	.97	4.72	1.59
21A	840	600	420	.020	3.94	.69	4.09	.84	.84	4.22	.97	5.09	1.84
24A	840	600	420	.020	4.44	.69	4.59	.84	.84	4.72	.97	5.59	1.84
28A	1500	600	840	.020	4.75	.38	4.91	.53	.53	5.03	.66	6.09	1.72
33A	1500	1248	840	.020	5.38	.25	5.53	.41	.41	5.66	.53	6.78	1.66
39A	1620	1248	1500	.025	6.38	.38	6.53	.53	.53	6.66	.66	8.03	2.03
46A	1620	1248	1500	.025	7.12	.38	7.28	.53	.53	7.41	.68	8.78	2.03
53A	3540	1248	2400	.025	8.31	.69	8.56	.94	.94	8.75	1.12	10.56	2.94
62A	3540	2040	2400	.030	9.56	.94	9.81	1.19	1.19	10.00	1.38	11.88	3.25
72A	6480	2040	4860	.030	10.75	1.50	11.06	1.81	1.81	11.31	2.06	13.44	4.19
85A	6480	2040	4860	.030	11.75	1.50	12.06	1.81	1.81	12.31	2.06	14.44	4.19

▲ Align coupling within limits specified above. Exceeding these limits reduces coupling life.

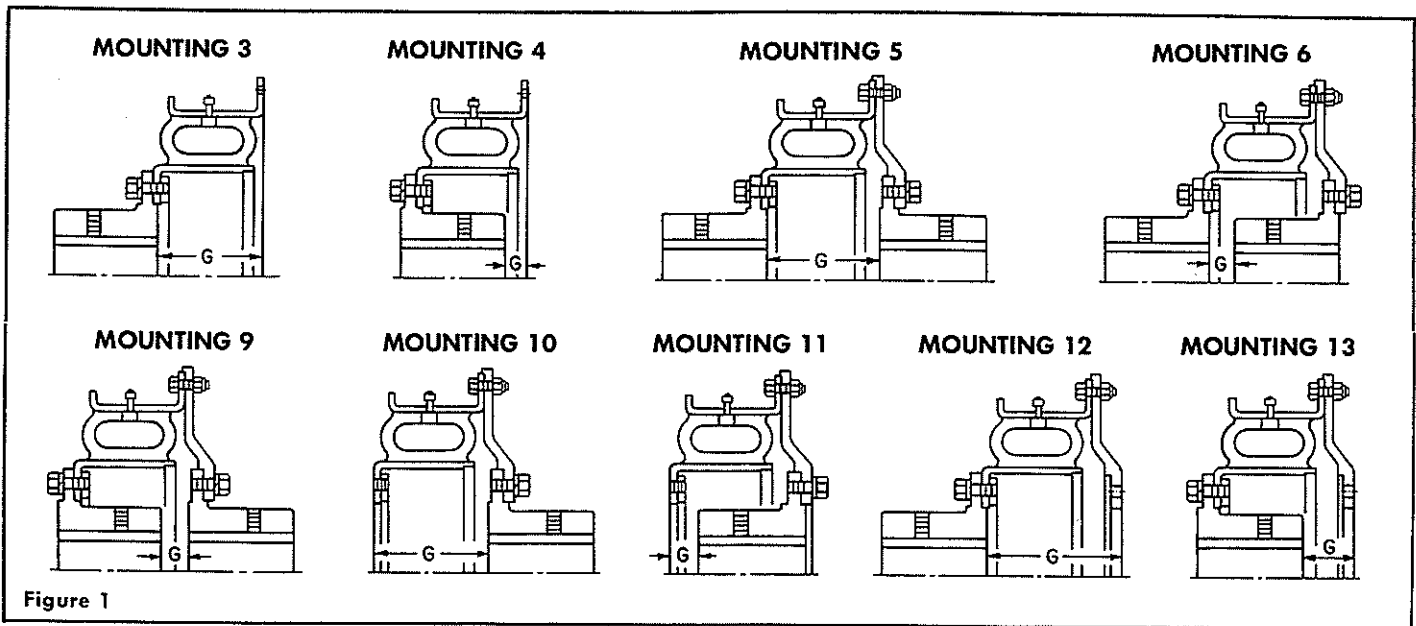


Figure 1

INSTALLATION OF TYPE A AIRFLEX COUPLINGS WITH FLOATING SHAFT

1 DETERMINE MOUNTING DISTANCE (MD)

The mounting distance (Page 1) is equal to the length of the floating shaft plus Dimension G (Fig. 1) for each coupling assembly. See Table 1, Page 1 for Dimension G.

2 MOUNT HUBS

Lock out starting switch of prime mover. Clean all metal parts with a non-flammable solvent. Place the adapters on the shafts BEFORE mounting the adapter hubs. Mount hubs on their respective shafts so that the hub face is flush with the end of its shaft (Fig. 2). Tighten set screw when provided. Heat interference fit hubs as instructed on Page 1. Level "fixed unit" and tighten foundation bolts.

Bolt adapters to adapter hubs and glands to gland hubs. Tighten fasteners to torque specified in Table 1. Check for proper engagement of register fits.

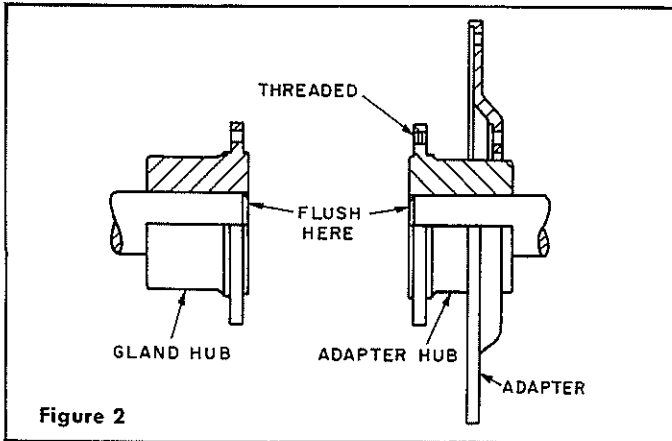


Figure 2

3 ALIGN GLAND AND ADAPTER REGISTER

Support floating shaft with "V" blocks and provide a means of raising and lowering them to accurately position shaft.

Position floating shaft so that A and B on the fixed end are equal when measured in four (4) places 90° apart (Fig. 3). Carefully engage register. DO NOT distort rubber element. Install fasteners and torque to value specified in Table 1. Position movable unit so that A and B are equal when measured in four (4) places 90° apart (Fig. 3). Carefully engage register. DO NOT distort rubber element. Install fasteners and torque to value specified in Table 1.

IMPORTANT: Remove "V" blocks from floating shaft.

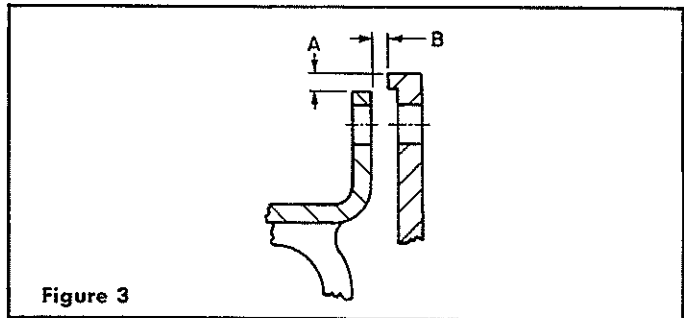


Figure 3

4 ANGULAR AND PARALLEL ALIGNMENT

Mount dial indicator as shown on Page 1. The mounting must be rigid and the reading surface must be clean and smooth. Position dial indicator for the mid-point of travel and set to "0". Rotate coupling one complete turn (360°). The total indicator reading must not exceed the alignment limit specified in Table 1. Adjust position of movable unit as required; tighten all foundation bolts and recheck coupling alignment. Realign if necessary.