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## <u>INSTALLATION INSTRUCTIONS FOR FENNER TYPE</u> <u>FENAFLEX TYRE SPACER COUPLINGS.</u>

# ASSEMBLY

- 1.0 Thoroughly Clean all components paying particular attention to the removal of the protective coating in the flange bores and bushes
- 1.1 Place each cleaned "Taper Lock Bush" in its respective flange and slide the flange onto its shaft. If keys are required, side fitting keys with top clearance should be used.
- 1.2 Using a straight edge line up the faces indicated with the shaft ends. Using a Dial clock gauge check the run-out of the spacer flange.
- 1.3 Position the "Fenaflex" flange on the spacer shaft to dimension "Y" shown in the Table 3 below
- 1.4 Locate Spacer sub assembly on to the spacer flange and engage spigot, align holes and insert screws and tighten to the torques indicated in Table 4

- 1.5 Open out the Tyre to fit over the coupling flanges ensuring that the tyre bead seats properly on the flanges. To ensure proper seating it may be necessary to strike the tyre with a small soft head mallet. When seated there should be a gap in the tyre as shown in Table 2
- 1.6 Tighten clamping ring screws alternatively and evenly (approx half a turn at a time) working around each flange until required screw torque is achieved, see Table 1

### DISMANTLING

- 1.1 Support the spacer sub-assembly
- 1.2 Remove the clamping ring screws progressively and evenly (half a turn at a time) to prevent distortion of the clamping rings
- 1.3 Remove the tyre
- 1.4 Remove the Spacer flange screws and lift out the spacer sub-assembly

### Table 1

Coupling size	F40	F50	F60	F70	F80	F90	F100	F110	F120	F140	F160
M mm	22	25	33	24	26	29	29	29	29	33	30
Size mm	<i>M6</i>	<i>M6</i>	<i>M6</i>	<i>M</i> 8	<i>M</i> 8	M10	M10	M10	M12	M12	M16
Torque Nm	15	15	15	24	24	40	40	40	50	55	80

#### ASSEMBLY OF TYRE COUPLINGS

- 1.0 Thoroughly clean all components, paying particular attention to the removal of the protective coating in the bore of the flanges
- 1.1 Fit the flanges to the shafts after placing the external clamp rings on the shafts. (where Taper Lock Bushes are used see separate fitting instructions supplied ) Locate the flanges so that the dimension 'M' is obtained (see Section 1.2). Flanges with internal

clamping rings should then have the clamping rings fitted, engaging only two of the threads of the screws at this time

- 1.2 Bring the shafts into line until dimension 'M' is obtained (Table 1). If shaft end float is to occur, locate the shafts at the mid position of the end float when checking dimension 'M'. Note that the shaft ends may project beyond the faces of the flanges if required. In this event, allow sufficient space between shaft ends for end float and misalignment. Flanges should be fitted flush with the end of the shaft when used with Mill-Motor flanges.
- 1.3 Check parallel alignment by laying a straight edge across the flanges at several positions around the circumference. Check angular alignment by measuring the gap between the flanges at several positions around the circumference. It is desirable to align the coupling as accurately as possible, particularly on high speed applications.
- 1.4 Open out the tyre and fit over the coupling flanges ensuring that the tyre beads seat properly on the flange and/or clamping rings. To ensure proper seating, it may be necessary to strike the outside diameter of the tyre with a small soft head mallet. When seated there should be a gap between the ends of the tyre as shown in Table 2
- 1.5 Tighten the clamping ring screws alternately and evenly (half a turn at a time) working around each flange until the required screw torque is achieved (Table 2)







# <u>Table 2</u>

Coupling size	F40 to F60	F70 to F120	F140 to F160	F180 to F250
Tyre Gap (mm)	2.0	3.0	5.0	6.0

# <u>Table 3</u>

	Dimension	'Y' For Nomi	nal DBSE
	100mm	140mm	180mm
F40	83	123	
F50	82	123	
F60	75	115	155
F70	76	116	156
F80	74	114	154
F90		111	151
F100		111	151
F110		115	155
F120		111	151
F140		104	144

## <u>Table 4</u>

Flange Size	Screws	Torque (Nm)
SM16	M10	20
SM25	<i>M12</i>	25
SM30	M16	40
SM35	M16	90

Note:- If necessary the DBSE may be extended. The maximum DBSE possible is achieved when the spacer shaft end and driven shaft end are flush with the face of their respective Taper Lock Bushes.