

IMPORTANT INSTRUCTIONS

Made in
U.S.A.

F Series Precision Flexible Shaft Coupling

FLEXIBLE COUPLING BASICS

A flexible coupling is used to connect shafts that are misaligned without applying the high stresses to the adjacent bearings that would result from the use of rigid couplings. The FSI coupling is designed to accommodate angular and parallel misalignment, plus axial motion without damage to the coupling or the components it is protecting. With proper application the coupling will not suffer permanent distortion in use and will have a service life well in excess of the adjacent components.

ENCODERS AND COUPLINGS

A rotary encoder is only as accurate as the flexible coupling that joins it to the rotating component is monitoring. Windup, rotary frequency and hysteresis are all critical factors. Research has proven the FSI six beam flexible coupling is superior in all of these factors when tested at their most probable and worst misaligned conditions. See F Series data sheets for additional information.

CHECK FOR EXCESSIVE MISALIGNMENT BEFORE ASSEMBLY

1. Place a steel rule on one shaft. Use a set of feeler gauges to determine the space between the rule and the other shaft (Fig. 1).
2. Move 90° from the first checkpoint and repeat the procedure (Fig. 2).

INSTALLATION

A flexible coupling should be installed in its natural position. Installation in a compressed condition will limit the ability of the coupling to flex adequately and installation in a stretched condition may shorten the life of the coupling by exceeding the yield point when flexed.

1. Remove oil or any foreign substance from the shafts and coupling bores, then fasten the coupling to one shaft (Figures 3 & 4).
2. Put the second shaft into the coupling bore and rotate the coupling in relation to the unfastened shaft, allowing the coupling to seek its normal position (Fig. 5). Do not compress or extend the coupling after it has reached its normal misaligned position.
3. Fasten the coupling to the second shaft (Fig. 6).
4. Check to see that light can be seen clearly between the beams.

CHECKING FOR EXCESSIVE MISALIGNMENT AFTER ASSEMBLY

1. Place a steel rule on one hub. Use a set of feeler gauges to determine the space between the steel rule and the other hub (Fig. 7).
2. Move 90° from the first checkpoint and repeat the procedure (Fig. 2).
3. Check to see that light can be seen clearly between the beams.



Figure 1



Figure 2

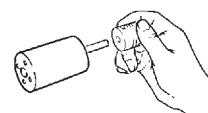


Figure 3

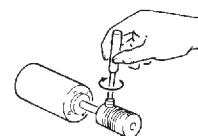


Figure 4

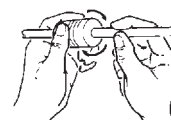


Figure 5

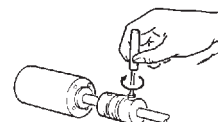


Figure 6



Figure 7



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