

#### **Power Transmission Solutions**

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# **A WARNING**

- · Read and follow all instructions carefully.
- Disconnect and lock-out power before installation and maintenance.
   Working on or near energized equipment can result in severe injury or death.
- Do not operate equipment without guards in place. Exposed equipment can result in severe injury or death.

## **A** CAUTION

 Periodic inspections should be performed. Failure to perform proper maintenance can result in premature product failure and personal injury.

### Mounting:

 Remove dirt and grease from coupling bore, shaft, and bushing (if bushed coupling). Do not use antigalling or antiseizing compounds when installing hubs or bushings to each other or onto the shaft. Make sure there are no burrs on the shaft, bore, key, or keyway.

#### 2. Install Sprockets

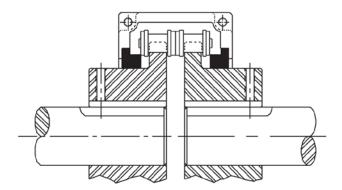
Finished bore sprockets: If using a cover, place seal rings on shafts. (Refer to Table 1 for correct seal selection). Place each shaft key in place and slide each coupling sprocket into place on shafts. Tighten setscrews to the torque specified in Table 4.

**Bushed bore sprockets:** If using a cover, place seal rings on shafts. (Refer to Table 1 for correct seal selection). Place bushings (and external keys if applicable) into sprockets and start screws. Place assemblies on shafts so that bushing barrels are approximately flush with the end of the shafts. Install shaft key if applicable. Tighten bushing screws as specified by bushing instructions. **See back page for TBF and TBH Hub Installation.** 

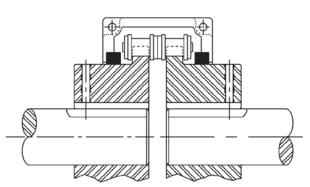
# Table 1 Seal Selection

Finished Bore		Minimum Bore		Bushed Bore	
Coupling	Seal Assy	Coupling	Seal Assy	Coupling	Seal Assy
C4012	Α	C40B12	A	C4020XH	Α
C4016	В	C40B16	В	C5016XH	A
C5016	A	C50B16	A	C5018XP	В
C5018	В	C50B18	В	C6018XP	Α
C6018	A	C60B18	A	C6020XB	В
C6020	В	C60B20	В	C8018XQ	Α
C8018	A	C80B18	A	C10018XR	A
C8020	В	C80B20	В	*C4016 x 1108	В
C10018	Α	C100B18	A	*C5018 x 1610	В
C10020	В	C100B20	В	*C6020 X 2012	В
* Child TDF and TDLL use the same and				*C8020 x 3020	В
* Style TBF and TBH use the same seal.			*C10020 x 3535	В	

### Seal Assembly "A"



# Seal Assembly "B"



Note: Seals for Assembly "A" and Assembly "B" are shipped with each housing, discard unused seal assembly.

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### 1. Align Shafts

Since some misalignment usually develops because of shifting, wear, and settling, the sprockets should be aligned as well as possible to increase coupling life. Move the equipment to align the sprockets. Check angular and parallel misalignment with a magnet base dial indicator as follows. Maintain sprocket spacing as indicated in Table 2. Maximum allowable runouts are given in Table 3.

Table 2 Sprocket Spacing and Max Cover Speeds					
Coupling Ref. No.	Spacing, L	Max. Cover rpm			
C4012, C4016	5/16	4775			
C4020	5/16	3727			
C5016, C5018	3/8	3727			
C6018, C6020	7/16	2996			
C8018, C8020	9/16	2333			
C10018, C10020	3/4	1886			

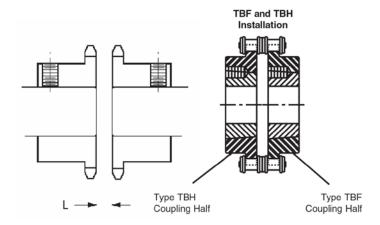


Table 3						
Maximum Allowable Runout (Inches)						
Coupling No.	Parallel	Angular				
4012	.010	.014				
4016	.010	.020				
4020	.010	.025				
5016	.012	.025				
5018	.012	.032				
6018	.015	.035				
6020	.015	.039				
8018	.020	.046				
8020	.020	.052				
10018	.025	.058				
10020	.025	.065				

- A. Angular Alignment: Mount the indicator base on one hub face, or side of sprocket for large sprockets. Place the pointer on the corresponding location on the other sprocket and rotate the indicator. Adjust the machines until there is little or no runout. Alternatively, a feeler gauge can be used between the two sprockets at 90° intervals. This reading should be the same at all four locations.
- B. Parallel Alignment: Mount the indicator base on the outside diameter of one sprocket hub. Place the pointer on the O.D. of the other hub. Rotate the hub while watching the indicator. Adjust the machines until there is little or no

#### 2. Cover Assembly

Wrap coupling chain around sprocket teeth and install connecting link. Apply a small amount of medium duty bearing grease to each seal and slide seals onto coupling hubs. Place cover halves around coupling, position gaskets, install and tighten cover screws. Be careful to maintain proper seal position.

Tighten foundation bolts and re-check alignment.

Table 4 Setscrew Torques (straight bore sprockets)				
Setscrew	Torque in. lbs.			
10-24 x 1/4	33			
10-24 x 3/8	33			
1/4-20 x 1/4	87			
1/4-20 x 3/8	87			
3/8-16 x 3/8	290			

#### 5. Lubrication

Remove the two pipe plugs from the cover. Install a grease fitting in one of the holes. Slowly fill the coupling with medium duty bearing grease having a minimum melting point of 260 degrees F. until grease comes out the other hole. Remove the grease fitting and replace the two pipe plugs. Do not use cup grease. Regrease at regular intervals or when necessary by repeating procedure.

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