ZERO-MAX

CD® Power-Series Composite Disc Coupling

Installation Instructions For Double-Flex Clamp Hub x Clamp Hub Couplings

Tools Required

- Calibrated torque wrench
- Hex socket set
- Shaft alignment tools
- Cleaning cloth
- Caliper

- These instructions are for standard series couplings with normal running conditions.
  Special couplings may have different instructions or drawings.
- When initially mounting the coupling, the misalignment may be one and one half times the maximum permissible misalignment shown in the catalog. Inspect hub bores, shafts, and keyways making sure there are no burrs. Clean hub bores and shafts. Standard CD coupling hub bores are supplied with slight clearance fit (see catalog).
- Install the coupling onto the shafts. It is recommended that the ends of both shafts be flush with the end of each hub. At the minimum each shaft should extend past the hub clamp slot and extend into one third of the hub flange (non-slotted) area. If the shaft extends past the hub face verify there is enough clearance between shaft and disc pack and the shaft (and key, if applicable) will not contact the disc pack during operation.
- Tighten one clamp hub socket head cap screw to lock the hub onto the shaft. See the Table on page 2 for the proper tightening torque.
- NOTE: If Clamp Hub is a Two-Bolt (C2) Split Clamp Hub, hand-tighten both bolts initially making sure the gap is even on both sides of the shaft. **Do not apply lubricant to the screw threads.** Next, tighten fasteners half turn in a continuous sequence until fasteners reach tightening torque. After each fastener has been tightened to the proper torque, repeat tightening sequence at tightening torque.
- Adjust hub separation to dimension “C” specified in the Table on page 2. Tighten Second hub to the shaft. See the Table on page 2 for the proper tightening torque.
- NOTE: If Clamp Hub is a Two-Bolt (C2) Split Clamp Hub, hand-tighten both bolts initially making sure the gap is even on both sides of the shaft. **Do not apply lubricant to the screw threads.** Next, tighten fasteners half turn in a continuous sequence until fasteners reach tightening torque. After each fastener has been tightened to the proper torque, repeat tightening sequence at tightening torque.
- Align the shafts within the limits for axial, parallel, and angular misalignment specified on the Table on page 2. For best alignment results, use a laser alignment tool or dial indicator. If not available, a straight edge and feeler gauges can be used.

Note: Aligning the shafts as closely as possible at the time of initial installation will reduce noise and allow the coupling extra capacity for misalignments and loads which will occur during operation over the life of the connected equipment. Installing and operating coupling at higher degrees of misalignment is possible (see catalog ratings), but will generally reduce the life of the composite disc pack.

Note: Coupling and shaft alignment should be checked periodically due to foundation settling, equipment shifting, etc. Alignment should be re-checked after the first several hours of operation.

⚠ **Caution: Rotating equipment is potentially dangerous and should be properly guarded. It is the responsibility of the machine builder, user, or operator to follow all applicable safety codes and provide a suitable guard. Make sure the machine is “locked out” and cannot be accidently started during installation or maintenance of coupling.**

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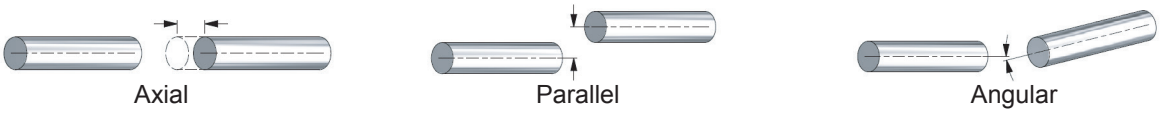

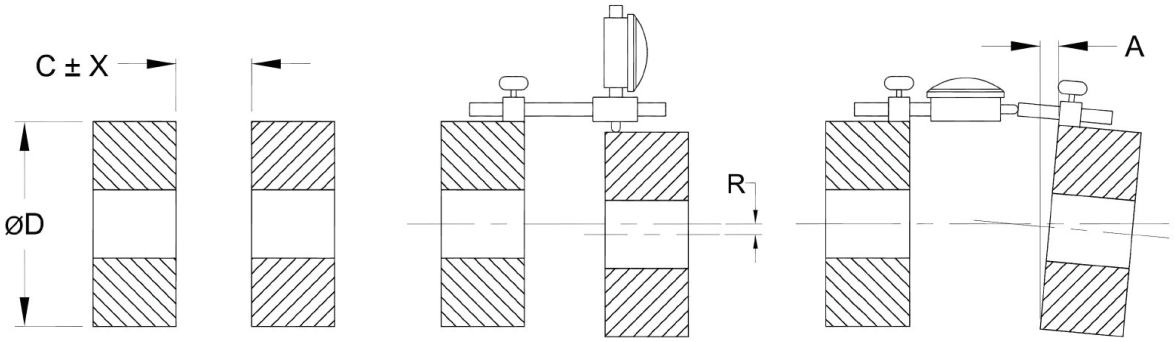

DIAGRAM 1
CHECK HUB SEPARATION

DIAGRAM 2
CHECK PARALLEL MISALIGNMENT

DIAGRAM 3
CHECK ANGULAR MISALIGNMENT

Table 1: Alignment and Assembly Specifications for Double-Flex Clamp Hub x Clamp Hub

	C±X Axial Separation and Misalignment	R Parallel Misalignment	A Angular Misalignment		Clamp Hub Socket Head Cap Screw C1 Hub = 1 Fastener C2 Hub = 2 Fasteners		Disc Pack Socket Head Cap Screw	
Model	**Inch (mm)**	**Inch (mm)**	**Inch (mm)**	**Angle (degrees)**	**Wrench Size**	**Tightening Torque**	**Wrench Size**	**Tightening Torque**
8P55	1.142 ±0.006 (29.00 ±0.15)	0.0016 (0.041)	0.009 (0.24)	0.25	5 mm	140 in lbs (16 Nm)	2.5 mm	13 in lb (148 Ncm)
8P67	1.332 ±0.008 (33.83+0.20)	0.0021 (0.053)	0.012 (0.29)	0.25	6 mm	190 in lbs (21 Nm)	3 mm	28 in lb (320 Ncm)
12P85	1.349 ±.006 (34.28 ±0.15)	0.0015 (0.038)	0.010 (0.25)	0.17	6 mm	30 ft lbs (41 Nm)	4 mm	59 in lb (7 Nm)
12P95	1.518 ±0.006 (38.56 ±0.15)	0.0016 (0.041)	0.011 (0.28)	0.17	8 mm	60 ft lbs (81 Nm)	4 mm	71 in lb (8 Nm)
12P105	1.836 ±.008 (46.63 ±0.20)	0.002 (0.051)	0.012 (0.31)	0.17	8 mm	60 ft lbs (81 Nm)	5 mm	119 in lb (13 Nm)
12P120	2.074 ±0.008 (52.68 ±0.20)	0.0021 (0.053)	0.014 (0.35)	0.17	10 mm	100 ft lbs (135 Nm)	6 mm	188 in lb (21 Nm)
12P140	2.232 ±0.010 (56.69 ±0.25)	0.0025 (0.064)	0.016 (0.41)	0.17	12 mm	145 ft lbs (197 Nm)	6 mm	298 in lb (34 Nm)
12P165	2.664 ±0.012 (67.67 ±0.30)	0.003 (0.076)	0.019 (0.48)	0.17	14 mm	240 ft lbs (325 Nm)	8 mm	48 ft lb (65 Nm)
12P190	3.184 ±0.014 (80.87 ±0.35)	0.0036 (0.091)	0.022 (0.56)	0.17	14 mm	300 ft lbs (407 Nm)	10 mm	78 ft lb (105 Nm)
12P215	3.779 ±0.014 (95.97 ±0.35)	0.0043 (0.109)	0.025 (0.63)	0.17	17 mm	380 ft lbs (515 Nm)	12 mm	118 ft lb (160 Nm)

Note: The above misalignment specifications are recommended values for installation.They allow for extra capacity from operation over time. Refer to the catalog for maximum allowable misalignment specifications.

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