

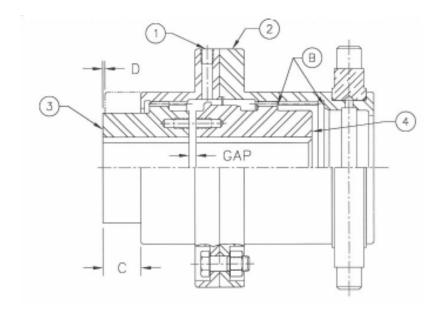
# ACS-CL Cutout Gear Coupling Installation Instructions

P-5049-TBW FORM 1307

**Important Notice:** Because of the possible dangers to person(s) or property from accidents which may result from the use of it is important that correct procedures be followed. Product must be used in accordance with the engineering information specified in the catalog. Proper installation, maintenance, and operation procedures must be observed. The instructions in the instruction manual must be followed. Inspection should be made as necessary to assure safe operation under prevailing conditions. Proper guards and other suitable safety devices or procedures as may be specified in safety codes should be provided and are neither provided by TB Wood's Incorporated nor are the responsibility of TB Wood's Incorporated.

# Installation:

- 1. Place sleeve #1 over the shaft that will be running when the coupling is disengaged. Place sleeve #2 with the shifter collar on the other shaft.
- 2. Insert key in place.
- 3. Install hub #3 on the shaft with sleeve #1. Install hub with face flush with shaft end and shorter end of hub toward the shaft end.
- 4. Install hub #4 on shaft with face flush with shaft end and shouldered end of hub toward the shaft end.
- 5. Use plastic oil-proof sealing compound to prevent leakage of lubricant around key.
- 6. Bring the shafts together and check gap between hubs at quarter points (90 degrees apart). This can be done with tapered gauge or flat stock. It is important that this dimension be held and should be checked with shafts in the center of their total axial movement. For gap measurement refer to table.
- 7. Align coupling using a straight edge across the hub diameters. (Also at quarter points.)
- 8. Draw sleeves together.
- 9. Insert bolts and tighten the flange evenly. See table for proper bolt torque.
- 10. Yoke and lever assembly is not normally furnished with the coupling. These parts are fabricated by the user and installed around the shifter collar.
- 11. Move sleeve assembly into position shown on the sketch and check dimension "C" given in table. Coupling is now in the engaged position. Shifter lever should be locked to hold this position.
- 12. Unlock shifter lever and move the sleeve assembly until faces "B" butt together. Coupling is now in the disengaged position and should be locked to hold it in place. With coupling disengaged, dimension "D" should be shown in table. Rotate hub #3 to insure coupling is properly disengaged.
- 13. Yoke and lever assembly should be firmly supported to avoid any binding action with the shifter collar. Coupling should rotate freely with relation to shifter collar.
- 14. Lubrication system should operate before starting coupling. Oil flow should be sufficient to maintain operating temperature.
- 15. Apply grease through grease fitting in shifter collar.



BOLT SIZE	WRENCH TORQUE		
	FT. LBS.		
1/4	7		
3/8	27		
1/2	65		
5/8	132		
3/4	230		
7/8	367		
1	561		

SIZE	2	2 1/2	3	3 1/2
GAP	1/8	1/8	3/16	3/16
LUBE (GPM)	0.21	0.28	0.48	0.67
C	31/32	1	1 3/16	1 11/32
D	5/32	1/8	3/16	7/32

### **Lubrication:**

The ACS-CL type coupling requires continuous lubrication with oil. Oil feed nozzles should be selected to deliver correct quantity of oil to each gear mesh (see table). Cool oil to 100-120 degrees F and filter oil prior to its entering the coupling. Ten micron or finer filtration of oil is recommended. The oil is generally supplied from the bearing supply system and its viscosity ranges from 140-170 SSU. However, a higher viscosity oil will reduce the teeth wear rate and increase the coupling life.

#### Maintenance:

At regular intervals or during system shutdown, the coupling should be opened and inspected. Any accumulation of sludge should be removed since this may impair the oil flow rate and restrict axial movement. If sludge build-up is abnormally heavy, then more frequent cleaning intervals should be scheduled and/or finer filter for oil filtration used.

Visually examine all components for stress and wear. If gear teeth show excessive wear the coupling should be replaced. Embedment of teeth in the sleeve can restrict axial movement and lead to vibration problems.

Bolts should be replaced after 8 to 12 fittings or when they no longer have a positive lock with the lock nuts.



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